

4-クロロフェノールのラット新生児における哺育期投与試験

－最終報告書－

2000年10月11日

試験委託者 : 厚生省生活衛生局

東京都千代田区霞ヶ関 1-2-2 (〒100-0013)

試験施設 : 株式会社パナファーム・ラボラトリーズ 安全性研究所

熊本県宇土市栗崎町 1285 番地 (〒869-0425)

# 信頼性保証書

試験番号:49815

試験表題:4—クロロフェノールのラット新生児における哺育期投与試験

上記の試験の各段階を信頼性保証担当者が調査した。調査の段階、調査実施日、並びに運営管理者及び試験責任者への調査結果の報告日は下記のとおりである。

調査の段階	調査実施日	調査結果の報告日
試験計画書	1999年 6月 30日	1999年 6月 30日
試験計画書の変更書 PPLPA 4981501	1999年 8月 2日	2000年 4月 3日
PPLPA 4981502	1999年 10月 1日	2000年 4月 3日
PPLPA 4981503	2000年 1月 20日	2000年 4月 3日
PPLPA 4981504	2000年 10月 11日	2000年 10月 11日
動物の受入れ及び検収	1999年 7月 13日	1999年 7月 13日
被験物質の情報、受領、保存及び混合物調製	1999年 7月 21日	1999年 7月 22日
投与及び一般状態の観察	1999年 7月 26日	1999年 7月 27日
感覚機能検査	1999年 7月 26日	1999年 7月 27日
発育分化検査	1999年 8月 11日	1999年 8月 12日
剖検(離乳時)、採血及び血液学検査	1999年 8月 12日	1999年 8月 12日
剖検(検査期間終了時)及び器官重量測定	1999年 10月 14日	1999年 10月 14日
血液化学検査	1999年 10月 16日	1999年 10月 16日
病理組織標本作製(切り出し)	1999年 10月 19日	1999年 10月 19日
試験記録[最終報告書(案)作成時] 及び最終報告書(案)帳票	1999年 12月 27日 ～2000年 1月 4日	2000年 1月 4日
最終報告書(案)及び同上再調査	2000年 1月 17日～ 1月 19日	2000年 1月 19日
最終報告書(案)再調査	2000年 1月 21日	2000年 1月 21日
最終報告書及び保存資料	2000年 10月 11日	2000年 10月 11日

本試験は、OECD-GLP(OECD Principles of GLP,1981)及び厚生省の化学物質GLP(環保業第39号、薬発第229号、59基局第85号1984、一部改正1988)に従って実施されたことを保証する。また本報告書は、信頼性保証担当者が調査し、試験の方法が正確に記載され、かつ生データが正確に反映されていることを確認した。

信頼性保証部門責任者

2000年 11月 11日  
株式会社 パナファーム・ラボラトリーズ

## 陳述書

試験の表題 : 4-クロロフェノールのラット新生児における哺育期投与試験

試験番号 : 49815

表記試験は、OECD-GLP「OECD Principles of good Laboratory Practice (1981年5月OECD勧告)」及び厚生省の化学物質 GLP「新規化学物質に係る試験及び指定化学物質に係る有害性の調査の項目等を定める命令第4条に規定する試験施設について(昭和59年3月31日付環保業第39号、薬発第229及び59基局第85号)並びにその改正(昭和63年11月18日付)」を遵守して実施した。

試験責任者

2020 年 11 月 11 日  
株式会社パナファーム・ラボラトリーズ

## 署名欄

試験責任者

2020 年 10 月 11 日  
株式会社パナファーム・ラボラトリーズ



## 試験期間

1. 試験開始日 : 1999 年 6 月 30 日
2. 動物 (母動物)入荷日  
: 1999 年 7 月 13 日
3. 分娩日 : 1999 年 7 月 21 日
4. 投与開始日 : 1999 年 7 月 25 日
5. 剖検日 : 離乳時 (投与期間終了時, 22 日齢); 1999 年 8 月 12 日  
検査期間終了時 (85 日齢); 1999 年 10 月 14 日
6. 試験終了日 : 2000 年 10 月 11 日

## 試験の実施基準

1. GLP : OECD-GLP ; OECD Principles of Good Laboratory Practice  
(1981 年 5 月 OECD 勧告)  
化学物質 GLP ; 新規化学物質に係る試験及び指定化学物質に係る有害性の調査の項目等を定める命令第 4 条に規定する試験施設について (昭和 59 年 3 月 31 日付環保業第 39 号, 薬発第 229 号及び 59 基局第 85 号)並びにその改正 (昭和 63 年 11 月 18 日付)

## 試験の信頼性に悪影響を及ぼす疑いのある予期しえなかった事態及び試験計画書からの逸脱

試験の信頼性に悪影響を及ぼす疑いのある予期しえなかった事態の発生の発生はなく, また, 試験計画書からの逸脱もなかった.

## 保存物品及び保存場所

1. 試験計画に関する記録
2. 使用動物に関する記録
3. 飼育環境に関する記録
4. 被験物質に関する記録
5. 試験結果に関する記録
6. 保存用被験物質
7. 標本
8. 報告書
9. CD-R
10. そのほかの試験に関係した資料

なお、上記の資料は株式会社パナファーム・ラボラトリーズの資料保管庫に最終報告書提出後 10 年間（2000 年 10 月 12 日～2010 年 10 月 11 日）保存する。10 年間経過後の取扱いについては、試験委託者と協議の上決定する。

## 試験関係者

1. 試験責任者
2. 試験担当責任者
3. 被験物質管理
4. 被験物質混合物調製等
5. 被験物質混合物の濃度分析
6. 動物の受入れ
7. 検疫
8. 飼育管理
9. 群分け

10. 投与

11. 一般状態観察

12. 体重測定

13. 摂餌量測定

14. 尿検査

15. 血液学的検査

16. 血液化学的検査

17. 分娩日及び哺育検査

18. 感覚機能検査

19. 発育分化検査

20. 剖検

21. 器官重量測定

22. 病理組織標本作製

23. 病理組織学的検査

24. コンピュータシステム管理

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Appendix (個別データ)

## 要 約

4-クロロフェノールの安全性に関する毒性試験の一環として、哺育期間中の Crj:CD(SD)IGS ラット新生児に、0 (対照), 12, 60 及び 300 mg/kg の用量で 4 日齢から 21 日齢まで 18 日間反復経口投与するとともに、投与期間終了後 63 日間 (85 日齢まで)無処置で飼育しながら検査を行い、その毒性について検討した。動物は、1 群雌雄各 12 匹とし、各群半数を 22 日齢で、残りを 85 日齢で剖検した。また、成獣ラットの毒性試験成績と比較して相違点を検索し、以下の結果を得た。

試験期間を通して死亡例はなかった。一般状態の観察では、振戦が投与初日から 300 mg/kg 群の雌雄で投与後 15 分~1 時間に発現し、自発運動の低下を示す例もあったが、投与後 4 時間には消失した。翌日以降、自発運動の低下はみられず、振戦も投与期間の後期には発現例数が漸減し、投与期間終了後には変化はなかった。

体重、発育分化検査及び感覚機能検査では変化はなく、22 日齢 (離乳)以降の摂餌量、78~79 日齢での尿検査、22 日齢(投与期間終了時)並びに 85 日齢の剖検時に実施した血液学的検査及び血液生化学的検査でも変化は認められなかった。

器官重量では、22 日齢で剖検した 300 mg/kg 群の雌雄で肝臓重量の増加がみられたが、85 日齢で剖検した動物に変化は認められなかった。

剖検及び病理組織学的検査では変化は認められなかった。

以上のことから、本試験条件下での無影響量は、雌雄とも 60 mg/kg と考えられた。また、上述の結果と、先に実施した成獣ラットにおける 28 日間反復投与毒性試験の結果とを比較すると、ラット新生児では投与後の症状消失が遅く、肝臓重量の増加がみられたことから、成獣よりも毒性がやや強く発現することが示唆された。

## 緒 言

4-クロロフェノールの安全性に関する毒性試験の一環として、哺育期間中のラット新生児に 4 日齢から 21 日齢まで 18 日間反復経口投与するとともに、投与期間終了後 63 日間（85 日齢まで）無処置で飼育しながら検査を行い、その毒性について検討した。また、得られた結果を成獣ラットの毒性発現状況と比較して相違点を検索したので報告する。

## 試 験 材 料 及 び 方 法

### 1. 被験物質

[REDACTED] より提供された 4-クロロフェノール (Lot No. PJF-3) を試験に使用した。本被験物質は純度 99.29%，分子量 128.56 の白色~淡褐色の結晶である（添付資料 1-1）。試験期間中の被験物質の安定性については、投与期間終了後に残余の被験物質を上記の供給源にて分析することにより確認した（添付資料 1-2）。媒体にはコーンオイル（ナカライトスク株式会社，Lot No. V9F1519）を使用した。被験物質は室温、遮光下で、コーンオイルは室温でそれぞれ被験物質室の保管庫に保存した。

### 2. 使用動物及び飼育条件

Crj:CD(SD)IGS ラット（日本チャールス・リバー株式会社）の妊娠母動物を妊娠 14 日で 20 匹購入した。11 日間の検疫馴化期間中に分娩させ、哺育状況、母動物及び新生児の一般状態の観察を行うとともに、母動物の体重を測定し、健康と思われた新生児雌雄各 48 匹並びに健康状態及び哺育状況の良好な母動物 12 匹を選抜した。投与開始時の新生児は 4 日齢で、体重は雄が 10.7~12.9 g、雌が 9.4~11.6 g であった。動物は、温度  $24\pm2^{\circ}\text{C}$ （許容範囲  $21\sim27^{\circ}\text{C}$ ），湿度  $55\pm10\%$ （許容範囲 35~75%），照明 12 時間（午前 7 時~午後 7 時）及び換気回数 13~15 回/時に設定したバリアーシステム A 区域（飼育室 05 番）で飼育した。離乳前は床敷（ホワイトフレーク、日本チャールス・リバー株式会社）を入れたポリカーボネイト製ケージ（W265 × H185 × D425 mm）に母動物 1 匹及び新生児雌雄各 4 匹をまとめて収容し、離乳後はステンレススチール製ケージ（W260 × H200 × D380 mm）に新生児 1 匹を収容した。試験期間中の温度の

実測値は最高 26°C、最低 22°C、湿度の実測値は最高 74%、最低 51%であった。母動物及び離乳後の新生児には高圧蒸気滅菌処理した固型飼料 (MF、オリエンタル酵母工業株式会社)、並びに次亜塩素酸ナトリウムを添加 (約 2 ppm)した井戸水を給水瓶又は自動給水装置により自由に摂取させた。飼料については財団法人日本食品分析センターにて、また飲水については株式会社鶴城南九科研センターにて分析を行い、いずれも許容基準に適合していることを確認した。飼育器材は高圧蒸気滅菌したものを使用し、ケージ架台及びポリカーボネイト製ケージ用上蓋は 4 週間に 1 回以上、ステンレススチール製ケージは 2 週間に 1 回以上、ポリカーボネイト製ケージ及び給水瓶は週 1 回以上、受皿は週 3 回以上の頻度で交換するとともに、飼育室は毎日清掃し、消毒薬を浸したモップで清拭した。

### 3. 試験群構成、投与量設定の根拠及び群分け

試験群構成を下表に示した。

試験群	投与量 (mg/kg)	投与液濃度 (%)	投与容量 (mL/kg)	性別	使用動物数		動物番号
					離乳時剖検例 (22 日齢剖検)	離乳後検査実施例 (85 日齢剖検)	
対照群	0	0	5	♂	6	6	701~706, 707*~712*
				♀	6	6	751~756, 757*~762*
低用量群	12	0.24	5	♂	6	6	713~718, 719*~724*
				♀	6	6	763~768, 769*~774*
中間用量群	60	1.2	5	♂	6	6	725~730, 731*~736*
				♀	6	6	775~780, 781*~786*
高用量群	300	6	5	♂	6	6	737~742, 743*~748*
				♀	6	6	787~792, 793*~798*

\*：離乳後の検査を実施した動物。

投与量は、4-クロロフェノールのラットを用いた特殊生殖毒性予備試験 (投与量: 0, 20, 100 及び 500 mg/kg) の結果から設定した。すなわち、当該試験では 500 mg/kg 群の雌雄で振戦、自発運動の低下、呼吸緩徐及び体温低下がみられ、雄の全例、雌の 3/4 例が死亡した。また、20 及び 100 mg/kg 群の雄でヘモグロビン量及びヘマトクリット値の減少が認められた。したがって、本試験では、300 mg/kg を高用量とし、以下公比 5 をもって 60 及び 12 mg/kg を設定した。

群分けは、新生児が 3 日齢 (分娩日を 0 日齢として起算) になった時点で行った。すなわち、3 日齢の新生児に雌雄別に仮の連続番号を付けて体重を測定し、その体重を基に層別連続無

作為化法で各群に振り分けた。この際、1 腹当たりの新生児数が極端に少ないもの及び多いものは母動物ごと除外した。また、群分け後の新生児哺育のために、分娩後の健康状態及び哺育状況が良好な母動物を 12 匹選抜した。母動物への新生児の割り当ては下表のように行つた。残余の新生児及び母動物は試験から除外した。

試験群	性別	母動物番号及び割当て児数											
		離乳時(22 日齢)剖検分						検査終了時(85 日齢)剖検分					
		121	122	123	124	125	126	127	128	129	130	131	132
対照群	♂	1	1	1	1	1	1	1	1	1	1	1	1
	♀	1	1	1	1	1	1	1	1	1	1	1	1
低用量群	♂	1	1	1	1	1	1	1	1	1	1	1	1
	♀	1	1	1	1	1	1	1	1	1	1	1	1
中間用量群	♂	1	1	1	1	1	1	1	1	1	1	1	1
	♀	1	1	1	1	1	1	1	1	1	1	1	1
高用量群	♂	1	1	1	1	1	1	1	1	1	1	1	1
	♀	1	1	1	1	1	1	1	1	1	1	1	1

#### 4. 投与経路及び投与方法

投与経路は、OECD 試験法ガイドラインに準じ、また予想されるヒトへの曝露経路の一つである経口投与とした。投与には胃管を用い、4 日齢から 21 日齢まで 1 日 1 回、18 日間反復投与した。投与容量は 5 mL/kg とし、個体ごとの投与液量は最新の体重を基に算出した。対照群には媒体を同様に投与した。

離乳後の検査を実施した動物については、投与期間終了後、63 日間無処置で飼育した。

#### 5. 被験物質の調製法及び調製頻度

被験物質を各濃度ごとに必要量秤量し、コーンオイルに溶解させ、0.24, 1.2 及び 6 w/v% 溶液を調製した。調製は週 1 回以上の頻度で行い、調製した投与液は褐色ガラスバイアルに入れて飼育区域内の検体保管室の保管庫にて室温保存した。本調製法による 0.2 及び 40 w/v% コーンオイル溶液は、褐色ガラスバイアル中で室温散光下 8 日間の安定性が確認されている（添付資料 2）。また、初回調製時に、各濃度の投与液について被験物質の濃度確認を実施し、設定濃度の許容範囲（±5%以内）にあることを確認した（添付資料 3）。

## 6. 観察、検査及び測定の頻度並びに方法

以下の観察、検査及び測定は、その時点で生存する新生児全例について実施した。新生児の哺育に使用した母動物については、新生児と同様の一般状態の観察及び体重測定を行って異常がないことを確認し、離乳後、安楽死させた。

### 1) 一般状態観察並びに体重及び摂餌量測定

一般状態の観察及び生死の確認を、離乳時まで(21日齢まで；投与期間中)は毎日投与前、投与後の2回、離乳後(22日齢以降；投与期間終了後)は1日1回行った。体重は投与開始日(投与1日)及びその後は週2回の割合で午前中に測定し、摂餌量は離乳後に週2回の割合で午前中に測定した。

### 2) 発育分化検査

耳介展開[4日齢(投与1日)]、毛生[8日齢(投与5日)]、切歯萌出[10日齢(投与7日)]、四足歩行及び眼瞼開裂[15日齢(投与12日)]、精巣下降[21日齢(投与18日)]、陰茎亀頭包皮分泌腺開裂[42日齢(投与期間終了後21日)]及び膣開口[42日齢(投与期間終了後21日)]を検査した。いずれの項目についても、陰性であった動物は以後陽性になるまで毎日検査した。なお、精巣下降、陰茎亀頭包皮分泌腺開裂及び膣開口については完了日に体重の測定を行った。

### 3) 感覚機能検査

面上正向反射及び同側屈筋反射[5日齢(投与2日)]、視覚性踏み直り反射[16日齢(投与13日)]及び耳介反射[28日齢(投与期間終了後7日)]について検査した。いずれの項目についても、陰性であった動物は以後陽性になるまで毎日検査した。

#### 4) 尿検査

11 週齢 (78 日齢)時に、代謝ケージを用いて午前 8~12 時の時間帯の新鮮尿を採取したのち、引き続き 24 時間蓄積尿を採取した。採尿日の給餌は新鮮尿採取後に行い、飲水は通常通り与えた。検査項目及び方法を以下に示した。

項目	方 法	単位又は表示
尿量	メスシリンダー測定	mL
色調	肉眼的観察	
浸透圧	冰点降下法 OSMOMETER OM801, VOGEL 社	Osm/kg
比重	屈折率法 尿屈折計、株式会社アタゴ	
	以上の 4 項目は 24 時間蓄積尿を用いて検査した。	
pH	試験紙法	5~9
蛋白質	試験紙法	— ~++++
ブドウ糖	試験紙法	— ~++++
ケトン体	試験紙法	— ~+++
ビリルビン	試験紙法	— ~++
潜血	試験紙法	— ~++
ウロビリノーゲン	試験紙法	<1, 1, 4, 8, 12 mg/dL

以上の 7 項目は新鮮尿を用いてプレテスト 8a(和光純薬工業株式会社)により検査した。

尿沈渣: 採取した新鮮尿を 1500 回転/分で 5 分間遠心分離し、得られた沈渣を鏡検し、以下の基準で判定した。

	—	+	++	+++
上皮細胞	1 視野に 3 個未満	1 視野に 3 個以上 10 個未満	1 視野に 10 個以上 20 個未満	1 視野に 20 個以上
赤血球	1 視野に 10 個未満	1 視野に 10 個以上 30 個未満	1 視野に 30 個以上 100 個未満	1 視野に 赤血球が重なり合ったり、過密状態で数の確認が不可能な場合
白血球	1 視野に 3 個未満	1 視野に 3 個以上 20 個未満	1 視野に 20 個以上 40 個未満	1 視野に 40 個以上
円柱	すべての視野に皆無	すべての視野で 1 個以上	—	—
非細胞沈渣*	1 視野に 10 個未満	1 視野に 10 個以上 20 個未満	1 視野に 20 個以上 30 個未満	1 視野に 結晶が重なり合ったり過密状態で数の確認が不可能な場合

倍率: ×400

\*: 主に磷酸塩、硫酸塩結晶

## 5) 血液学的検査

22 日齢(離乳時；投与期間終了時)及び 85 日齢時に実施した。ペントバルビタール・ナトリウム 30 mg/kg を腹腔内に投与して麻酔したのち、後大静脈腹部より血液約 0.5~1 mL を採取した。血球系の検査には、血液を EDTA-2K 2 mg 加採血ビン (SB-41 又は SB-44, シスメックス株式会社)に分注したものを用いた。また、85 日齢の動物については血球系検査の採血の前に、血液 0.9 mL を採取し、3.8%クエン酸ナトリウム 0.1 mL を入れた試験管に分注し、3000 rpm で 15 分間遠心分離して得られた血漿を血液凝固系検査に用いた。85 日齢の動物は、採血前日から 18 時間以上絶食させた。検査項目及び方法を以下に示した。

項目	方 法	単 位
白血球数	電気抵抗検出方式	$\times 10^2/\mu\text{L}$
赤血球数 (RBC)	電気抵抗検出方式	$\times 10^4/\mu\text{L}$
ヘモグロビン量 (Hgb)	Oxyhemoglobin 法	g/dL
ヘマトクリット値 (Hct)	血球 pulse 波高値検出方式	%
血小板数	電気抵抗検出方式	$\times 10^4/\mu\text{L}$
以上の 5 項目は多項目自動血球計数装置 (Sysmex CC-780, シスメックス株式会社)を用いて測定した。		
平均赤血球容積	$\frac{\text{Hct}(\%)}{\text{RBC}(10^4/\mu\text{L})} \times 10^3$	fL
平均赤血球血色素量	$\frac{\text{Hgb(g/dL)}}{\text{RBC}(10^4/\mu\text{L})} \times 10^3$	pg
平均赤血球血色素濃度	$\frac{\text{Hgb(g/dL)}}{\text{Hct}(\%)} \times 10^2$	%
以上の Wintrobe の赤血球恒数を RBC, Hgb 及び Hct より算出した。		
白血球形態検査 (白血球百分比)	May-Grünwald-Giemsa 染色	%
網状赤血球率	New methylene blue 超生体染色	‰
白血球形態検査は光学顕微鏡 (オリンパス光学株式会社)を用いて検査した。 ただし、網状赤血球率の検査は塗抹標本の作製まで実施し、検査は行わなかった。		
プロトロンビン時間	散乱光検出方式	秒
活性化部分トロンボプラスチン時間	散乱光検出方式	秒
以上の 2 項目は全自动血液凝固測定装置 (Sysmex CA-5000, シスメックス株式会社)を用いて測定した。ただし、22 日齢の動物については実施しなかった。		

## 6) 血液生化学的検査

22 日齢(離乳時；投与期間終了時)及び 85 日齢時に実施した。血液学的検査用の採血に引き続き、後大静脈腹部より全採血(最大 3 mL)した血液を、室温で約 60 分間放置後、3000 rpm で 10 分間遠心分離して得られる血清を用いた。検査項目及び方法を以下に示した。

項目	方 法	単位
総蛋白質量	Biuret 法	g/dL
アルブミン	BCG 法	g/dL
A/G 比	総蛋白質量及びアルブミン量より算出	
総ビリルビン	Vanadate oxidation 法	mg/dL
GOT	UV-rate 法	IU/L
GPT	UV-rate 法	IU/L
γ-グルタミルトランスペプチダーゼ	L-γ-Glutamyl-3-hydroxymethyl-4-nitroanilide 基質法	IU/L
アルカリ性 fosfotransferase	p-Nitrophenylphosphate acid 基質法	IU/L
コリンエステラーゼ	Butyrylthiocholine-DTNB 法	IU/L
アセチルコリンエ斯特ラーゼ	Acetylcholine 基質法	ΔpH
総コレステロール	COD-HDAOS 法	mg/dL
トリグリセライド	GPO-HDAOS 法, glycerol blanking 法	mg/dL
リン脂質	Choline oxidase-DAOS 法	mg/dL
グルコース	Hexokinase-G-6-PDH 法	mg/dL
尿素窒素	Urease-GLDH 法	mg/dL
クレアチニン	Jaffé 法	mg/dL
無機リン	PNP-XOD 法	mg/dL
カルシウム	MXB 法	mg/dL
以上の 18 項目は自動分析装置(7170, 株式会社日立製作所)を用いて測定した。		
ナトリウム	電極法	mEq/L
カリウム	電極法	mEq/L
クロール	電量滴定法	mEq/L
以上の 3 項目は電解質分析装置(PVA-αIII, 株式会社アナリティカル・インスツルメンツ)を用いて測定した。		

## 7) 剖検

22 日齢(離乳時；投与期間終了時)及び 85 日齢時に実施した。採血終了後、放血致死せしめ、速やかに解剖してすべての器官及び組織について異常の有無を綿密に検査した。途中死亡例についても同様に剖検を行った。

### 8) 病理組織学的検査

22 日齢(離乳時；投与期間終了時)及び 85 日齢時に実施した。下記の各器官・組織を 10% 中性緩衝ホルマリン溶液(ただし、精巣及び精巣上体はブアン液で前固定)で固定して保存した。対照群及び高用量群についてはパラフィン切片としたのち、ヘマトキシリソ・エオジン(HE)染色を施して鏡検した。途中死亡例についても同様に検査を行った。

脳	脾臓
下垂体	腎臓
甲状腺	副腎
心臓	精巣
肺(気管支を含む)	精巣上体
胸腺	卵巣
肝臓	

### 7. 統計学的処理

体重、摂餌量、尿検査(定性反応を除く)、血液学的検査、血液生化学的検査、器官重量及び体重比器官重量については、各群ごとに平均値と標準偏差を求め、まず、分散の均一性を Bartlett 法により検定した。分散が均一な場合は Dunnett の多重比較検定を用いて、異なる場合は Steel の多重比較検定を用いて対照群との比較を行った。発育分化検査成績 [(分化児数/検査児数)×100] と感覚機能検査成績 [(反応児数/検査児数)×100] については  $\chi^2$  検定により、病理組織学的検査については、Mann-Whitney の U 検定により解析した。いずれの検定においても有意水準は 1 及び 5%とした。

## 試験成績

### 1. 一般状態

一般状態の観察結果を Table 1 並びに Appendix 1 及び 2 に示した。

300 mg/kg 群では、振戦が投与開始日の投与後 15 分～1 時間に雄 9 例及び雌 10 例で発現した。振戦消失後、雄 4 例及び雌 3 例で自発運動の低下もみられたが、投与後 4 時間にはすべて消失した。翌日以降、自発運動の低下はみられず、振戦は投与期間の中期まで雄で 9~12 例、

雌で 7~12 例に発現したが、その後発現例数は漸減し、最終投与日には雄の 1 例で発現したのみであった。振戦の発現時間は投与期間を通して投与初日と同様であった。

12 及び 60 mg/kg 群では、投与期間中の一般状態に変化は認められなかった。

対照群では、雄 1 例が投与 9 日の投与直後から努力性呼吸及び自発運動の低下を呈したのち死亡したが、後述の如く病理学的検査で肺の出血とともに、胸腔内に媒体とみられる油状物の貯留が確認されたことから、投与過誤による死亡と判断した。

投与期間終了後にはいずれの群においても一般状態に変化は認められなかった。

## 2. 体重

体重推移を Fig. 1 及び 2, Table 2 並びに Appendix 3 及び 4 に示した。

雌では、投与期間中、並びに投与期間終了後ともにすべての被験物質投与群が対照群と同様な体重推移を示した。

雄では、投与期間中はすべての被験物質投与群が対照群と同様な体重推移を示したが、投与期間終了後 4 週頃からすべての被験物質投与群の体重が対照群に比較してやや低く推移した。

## 3. 摂餌量

離乳後（投与期間終了後）の摂餌量推移を Fig. 3 及び 4, Table 3 並びに Appendix 5 及び 6 に示した。

雄では、12 mg/kg 群の摂餌量が投与期間終了後 5 週頃から対照群に比較して低く推移し、有意な差がみられた日もあったが、60 及び 300 mg/kg 群に同様な変動がなかったことから、被験物質投与との関連はないと判断した。

雌では、すべての被験物質投与群が対照群と同様な摂餌量推移を示した。

## 4. 発育分化検査

検査結果を Table 4 及び Appendix 7 に示した。

雄では、60 mg/kg 群で陰茎亀頭包皮分泌腺開裂の遅れがみられた例があったが、300 mg/kg 群に同様な個体がいなかったことから、被験物質投与との関連はないと判断した。

雌では、すべての項目において対照群との差は認められなかった。

## 5. 感覚機能検査

検査結果を Table 5 及び Appendix 8 に示した.

雌では、 60 mg/kg 群で、 面上正向反射の陽性反応が遅延したが、 300 mg/kg 群に同様な変化がなかったことから、 被験物質投与との関連はないと判断した.

雄では、 すべての項目において対照群との差は認められなかった.

## 6. 尿検査

検査結果を Table 6 並びに Appendix 9 及び 10 に示した.

雌雄ともにすべての項目で変化は認められなかった.

## 7. 血液学的検査

22 日齢 (投与期間終了時)の検査結果を Table 7 並びに Appendix 11 及び 12 に示し、 85 日齢の検査結果を Table 8 並びに Appendix 13 及び 14 に示した.

22 日齢では、 12 mg/kg 群の雌で白血球数の減少がみられたが、 60 及び 300 mg/kg 群に同様な変動がなかったことから、 被験物質投与との関連はないと判断した.

85 日齢では、 300 mg/kg 群の雄で MCV の増加がみられたが、 生理的変動範囲内の軽微な変動であり、 他の赤血球系パラメータの変動も認められなかった. このほか、 12 mg/kg 群の雄でプロトロンビン時間の延長がみられたが、 60 及び 300 mg/kg 群に同様な変動がなかったことから、 被験物質投与との関連はないと判断した.

## 8. 血液生化学的検査

22 日齢 (投与期間終了時)の検査結果を Table 9 並びに Appendix 15 及び 16 に示し、 85 日齢の検査結果を Table 10 並びに Appendix 17 及び 18 に示した.

22 日齢では、 60 mg/kg 群の雌でコリンエステラーゼの減少がみられたが、 300 mg/kg 群に同様な変動がなかったことから、 被験物質投与との関連はないと判断した.

85 日齢では、 12 mg/kg 群の雄でクレアチニンの減少、 60 mg/kg 群の雄で無機リンの減少、 12 及び 300 mg/kg 群の雄で Cl の増加がみられたが、 60 ないし 300 mg/kg 群に同様な変動がないか、 用量相関性のない変動であったことから、 被験物質投与との関連はないと判断した.

## 9. 剖検

22 日齢 (投与期間終了時)及び途中死亡例の検査結果を Table 11 並びに Appendix 19 及び 20 に示し、85 日齢の検査結果を Table 12 並びに Appendix 21 及び 22 に示した。

22 日齢では、対照群を含むすべての群で変化は認められなかった。

途中死亡例では、肺の暗赤色斑が認められ、胸腔内に媒体とみられる油状物が貯留していた。

85 日齢では、精巣の軟化が 300 mg/kg 群の 1 例でみられたほか、腎臓の灰白色結節が対照群の雌 1 例、腎孟拡張が対照群の雄 1 例、副腎の肥大が対照群の雄 1 例で認められた。

## 10. 器官重量

22 日齢 (投与期間終了時)の測定結果を Table 13 並びに Appendix 23 及び 24 に、85 日齢の測定結果を Table 14 並びに Appendix 25 及び 26 に示すとともに、参考として途中死亡例の測定結果を Appendix 27 に示した。

22 日齢では、肝臓の相対重量の増加が 300 mg/kg 群の雌雄で認められた。このほか、甲状腺の相対重量の増加が 60 mg/kg 群の雌でみられたが、300 mg/kg 群に同様な変動がなかったことから、被験物質投与との関連はないと判断した。

85 日齢では、副腎の絶対及び相対重量の減少が 300 mg/kg 群の雄で認められた。このほか、下垂体の絶対重量の減少が 12 及び 300 mg/kg 群の雄でみられたが、相対重量に変化がなかつたことから、これらの群の体重がやや小さかったことに起因したものと判断した。

## 11. 病理組織学的検査

22 日齢 (投与期間終了時)及び途中死亡例の検査結果をそれぞれ Table 15 及び 17 に示すとともに、Appendix 28 及び 29 に示した。また、85 日齢の検査結果を Table 16 並びに Appendix 30 及び 31 に示した。

22 日齢では、肺の巢状の泡沢細胞集積が対照群の雌 1 例でみられたのみで、被験物質投与に関連した変化はなかった。

85 日齢では、肝臓の巢状壊死、心筋の巢状の変性/線維化、並びに精巣の萎縮が 300 mg/kg 群の雄でそれぞれ 1 例みられ、このうち精巣が萎縮していた例は精巣上体管腔の精子減少を伴っていた。これらのほか、腎孟拡張が対照群の雄 1 例でみられ、腎臓の細胞浸潤及び皮膚

境界部の鉱質沈着が対照群の雌でそれぞれ 1 例認められた。

途中死亡例では、肺に出血がみられたのみであった。

## 考 察

4-クロロフェノールの安全性に関する毒性試験の一環として、哺育期間中のラット新生児に 4 日齢から 21 日齢まで 18 日間反復経口投与するとともに、投与期間終了後 63 日間 (85 日齢)まで無処置で飼育しながら検査を行い、その毒性について検討した。また、その結果を成獣ラットの毒性発現状況と比較し、相違点を検索した。

試験期間を通して死亡例はなかった。一般状態の観察では、振戦が投与初日から 300 mg/kg 群の雌雄で投与後 15 分～ 1 時間に発現し、自発運動の低下を示す例もあったが、投与後 4 時間に消失した。翌日以降、自発運動の低下はみられず、振戦も投与期間の後期には発現例数が漸減した。

体重では、投与期間中は雌雄ともすべての被験物質投与群が対照群と同様な推移を示し、雌では投与期間終了後もすべての被験物質投与群が対照群と同様な体重推移を示した。一方、雄では、投与期間終了後 4 週頃から、すべての被験物質投与群の体重が対照群に比較してやや低く推移した。しかし、対照群との間に有意な差はなく、投与量の増加に伴って対照群との差が大きくなることもなかったこと、また、投与期間中の体重推移に対照群との差がなかったことから、毒性学的意義はないものと考えられた。

血液学的検査では、85 日齢の検査において 300 mg/kg 群の雄で MCV の増加がみられたが、生理的変動範囲内の軽微な変動であり、他の赤血球系パラメータの変動もなかったこと、22 日齢(投与期間終了時)の検査で同様な変動がなかったことから、毒性学的意義はないものと考えられた。

器官重量では、22 日齢で剖検した 300 mg/kg 群の雌雄で肝臓の相対重量の増加がみられ、本被験物質による肝臓への影響が示唆されたが、血液生化学的検査において肝機能関連パラメータの変動はなく、病理組織学的検査でも対応する器質的变化がなかったことから、重篤な変化ではないものと考えられた。また、85 日齢で剖検した動物には肝臓重量の増加はなく、回復性は明らかであった。一方、85 日齢では、副腎の絶対及び相対重量の減少が 300 mg/kg 群の雄でみられた

が、22日齢の検査で同様な変化がなく、対応する器質的変化もなかったことから、毒性学的意義は乏しいものと考えられた。

病理学的検査では、85日齢で剖検した300mg/kg群の雄で肝臓の巣状壊死、心筋の巣状変性/線維化、並びに精巣の萎縮及び精巣上体管腔の精子減少がみられたが、いずれも健常ラットで自然発生の変化として時に観察されるものであり、本試験での出現例数もそれぞれ1例と少なかつたことから、被験物質投与との関連はないものと考えられた。このほかには対照群の雌雄で自然発生の変化が認められたのみであった。

以上のほか、本試験では摂餌量の測定、発育分化検査、感覚機能検査、尿検査及び血液生化学的検査を実施したが、これらの検査では変化は認められなかった。

上述のように、本試験では300mg/kg群の雌雄で振戦が発現し、肝臓の重量増加がみられたが、60mg/kg以下の群には被験物質投与に関連した変化はなく、本試験条件下における無影響量は雌雄とも60mg/kgと考えられた。

上記の結果を、先に実施した成獣ラットの試験成績<sup>1)</sup>と比較すると、成獣ラットでも本試験でみられたと同様な振戦及び自発運動の低下が観察されているが、投与後20~30分には症状が消失しており、成獣に比較して新生児での症状消失が遅いことが示された。また、本試験では投与期間終了時に300mg/kg群で肝臓の重量増加がみられたが、成獣ラットでは500mg/kgを28日間投与しても同様な変動は認められていない。一方、成獣ラットでは、上述の症状に加えて頻呼吸、流涎等が500mg/kg群でみられているが、これらについては投与量の相違に起因した可能性があり、新生児と成獣との差を表すものとは言い難かった。また、成獣ラットでは、尿量の増加が雄で100mg/kg以上の群、雌で500mg/kg群にみられているが、当該試験において回復性が示されていることから、本試験で尿検査を実施した時点(投与期間終了後8週を経過した時点)では尿量への影響が完全に回復していた可能性が考えられた。以上より、ラットでは4-クロロフェノールを新生児に投与すると成獣に比較して毒性がやや強く発現することが示唆された。

## 参考文献

- 1) [REDACTED] (1999): 4-クロロフェノールのラットにおける28日間反復投与毒性試験、株式会社パナファーム・ラボラトリーズ(試験番号: 29847).

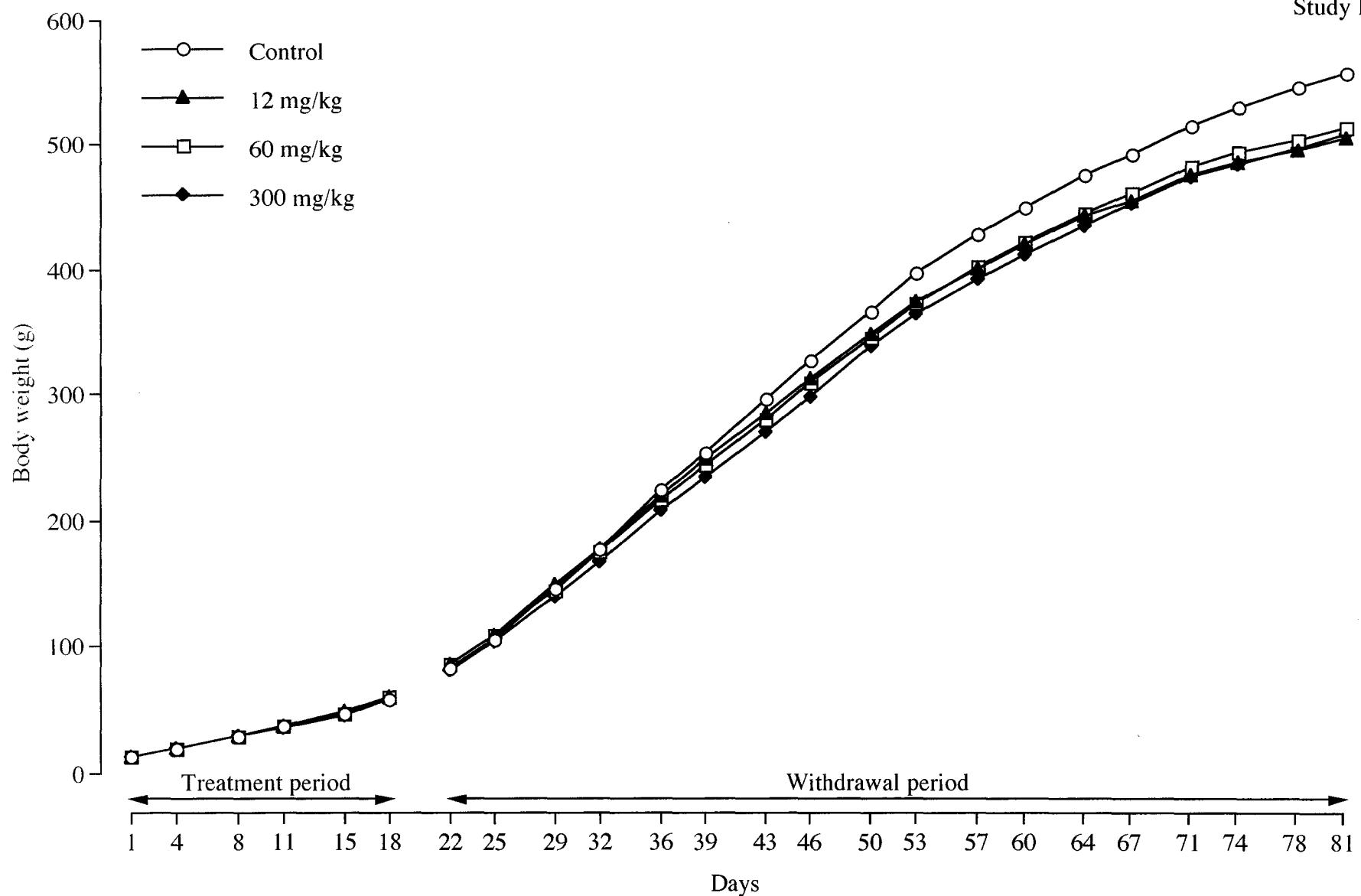


Fig. 1 Body weight changes in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period.

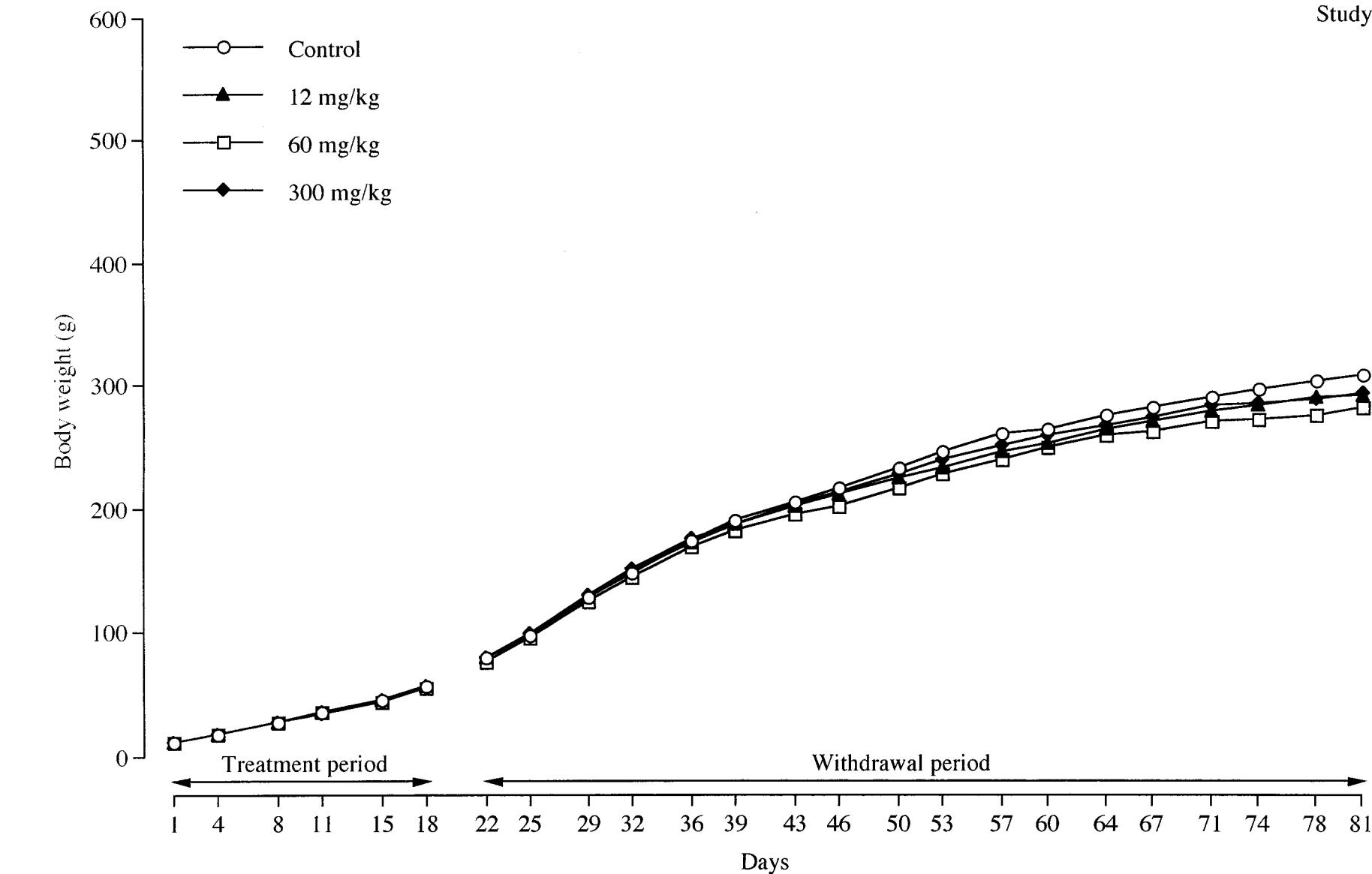


Fig. 2 Body weight changes in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period.

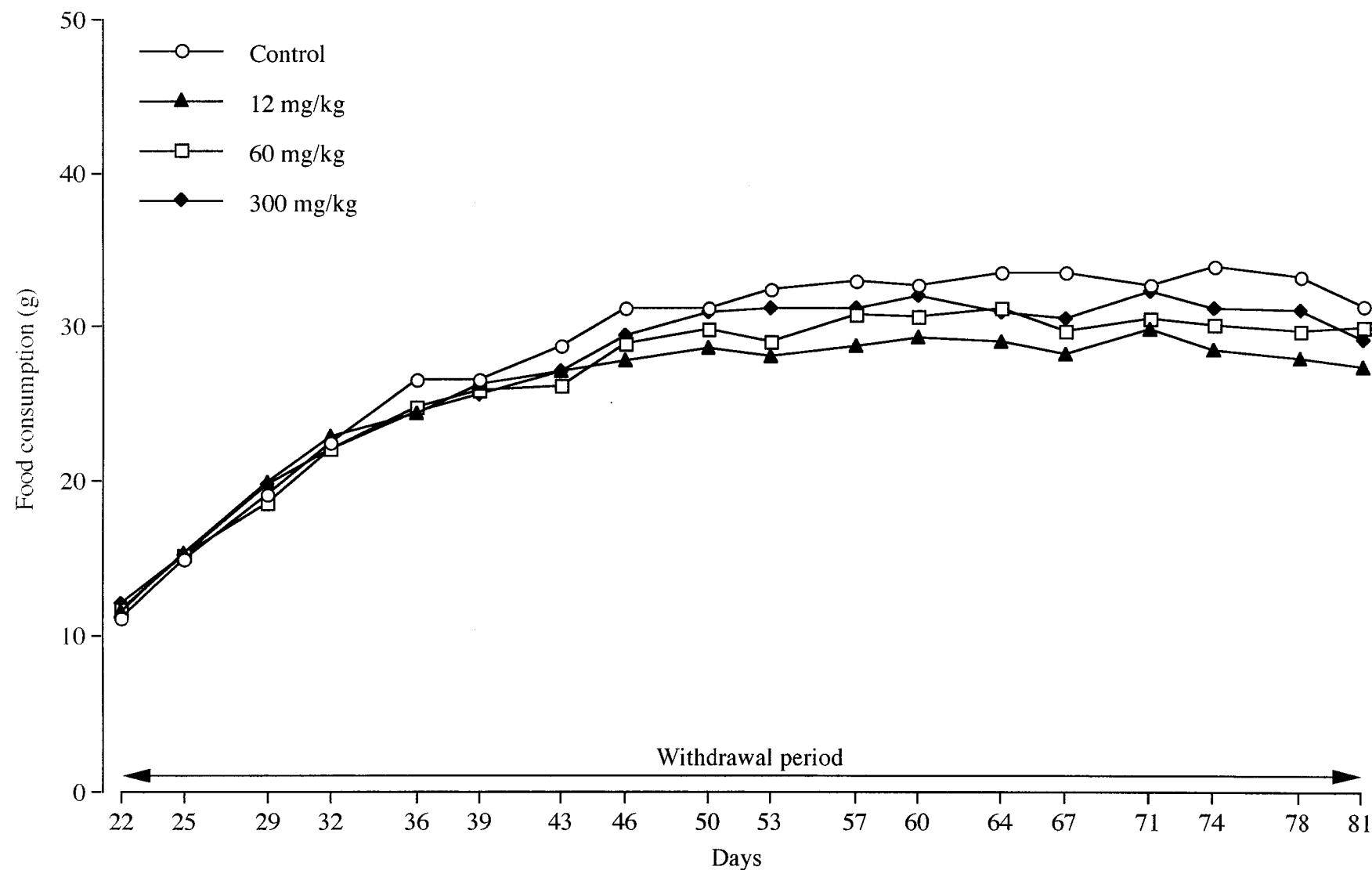


Fig. 3 Food consumption in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period.

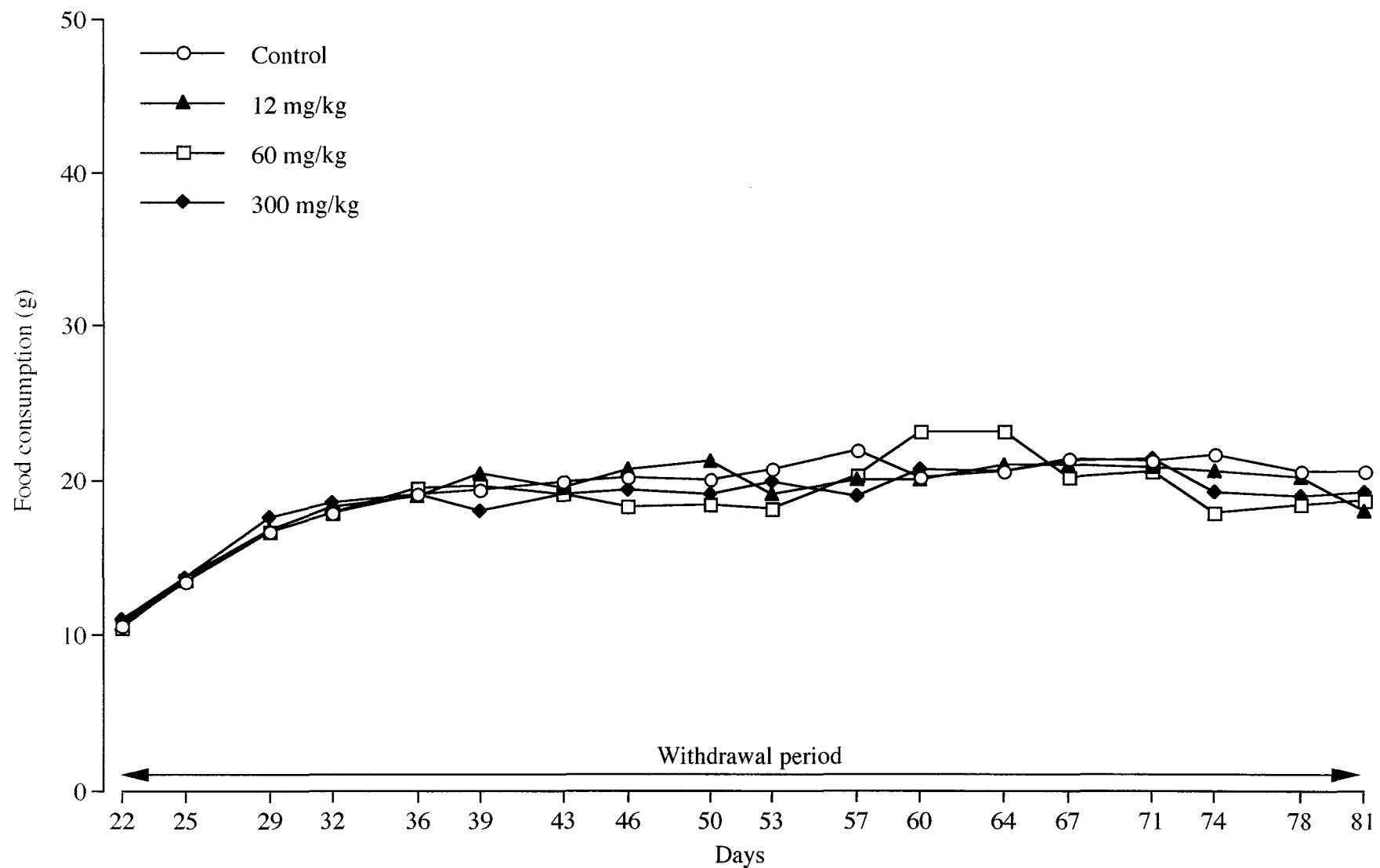


Fig. 4 Food consumption in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period.

Table 1 Clinical signs in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Sex	Group and dose	Clinical sign	Days																	
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Male	Control	Number of examined	12	12	12	12	12	12	12	12	12	11	11	11	11	11	11	11	11	11
		No abnormality	12	12	12	12	12	12	12	12	11	11	11	11	11	11	11	11	11	11
		Hypoactivity	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
		Dyspnea	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
		Dead	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	12 mg/kg	Number of examined	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
		No abnormality	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	60 mg/kg	Number of examined	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
		No abnormality	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	300 mg/kg	Number of examined	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
		No abnormality	3	3	2	3	0	1	0	1	1	3	2	6	11	11	11	9	11	11
		Hypoactivity	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Tremor	9	9	10	9	12	11	12	11	11	9	10	6	1	1	1	3	1	1
		Number of examined	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Female	Control	No abnormality	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
		Number of examined	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
		No abnormality	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	12 mg/kg	Number of examined	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
		No abnormality	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	60 mg/kg	Number of examined	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
		No abnormality	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
		Number of examined	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
		No abnormality	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
		Number of examined	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	300 mg/kg	No abnormality	2	5	4	4	2	0	0	0	2	2	3	5	9	11	10	11	10	12
		Hypoactivity	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Tremor	10	7	8	8	10	12	12	12	10	10	9	7	3	1	2	1	2	0

Table 1 - continued Clinical signs in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Sex	Group and dose	Clinical sign	Days																	
			19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Male	Control	Number of examined	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
		No abnormality	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
		Hypoactivity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Dyspnea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Dead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Male	12 mg/kg	Number of examined	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	No abnormality	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
Male	60 mg/kg	Number of examined	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	No abnormality	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
Male	300 mg/kg	Number of examined	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		No abnormality	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		Hypoactivity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Tremor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Female	Control	Number of examined	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		No abnormality	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Female	12 mg/kg	Number of examined	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	No abnormality	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
Female	60 mg/kg	Number of examined	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	No abnormality	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
Female	300 mg/kg	Number of examined	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		No abnormality	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		Hypoactivity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Tremor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 1 - continued Clinical signs in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Sex	Group and dose	Clinical sign	Days																		
			38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
Male	Control	Number of examined	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
		No abnormality	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
		Hypoactivity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Dyspnea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Dead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Male	12 mg/kg	Number of examined	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	No abnormality	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
Male	60 mg/kg	Number of examined	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	No abnormality	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
Male	300 mg/kg	Number of examined	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		No abnormality	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		Hypoactivity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Tremor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Female	Control	Number of examined	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		No abnormality	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	12 mg/kg	Number of examined	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		No abnormality	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	60 mg/kg	Number of examined	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		No abnormality	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Female	300 mg/kg	Number of examined	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		No abnormality	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		Hypoactivity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Tremor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 1 - continued Clinical signs in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Sex	Group and dose	Clinical sign	Days															
			57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
Male	Control	Number of examined	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
		No abnormality	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
		Hypoactivity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Dyspnea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Dead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Male	12 mg/kg	Number of examined	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	No abnormality	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
Male	60 mg/kg	Number of examined	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	No abnormality	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
Male	300 mg/kg	Number of examined	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		No abnormality	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		Hypoactivity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Tremor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Dead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Female	Control	Number of examined	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		No abnormality	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	12 mg/kg	Number of examined	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		No abnormality	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	60 mg/kg	Number of examined	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		No abnormality	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	300 mg/kg	Number of examined	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		No abnormality	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		Hypoactivity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Tremor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 1 - continued Clinical signs in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Sex	Group and dose	Clinical sign	Days					
			76	77	78	79	80	81
Male	Control	Number of examined	5	5	5	5	5	5
		No abnormality	5	5	5	5	5	5
		Hypoactivity	0	0	0	0	0	0
		Dyspnea	0	0	0	0	0	0
		Dead	0	0	0	0	0	0
	12 mg/kg	Number of examined	6	6	6	6	6	6
		No abnormality	6	6	6	6	6	6
	60 mg/kg	Number of examined	6	6	6	6	6	6
		No abnormality	6	6	6	6	6	6
	300 mg/kg	Number of examined	6	6	6	6	6	6
		No abnormality	6	6	6	6	6	6
		Hypoactivity	0	0	0	0	0	0
		Tremor	0	0	0	0	0	0
Female	Control	Number of examined	6	6	6	6	6	6
		No abnormality	6	6	6	6	6	6
	12 mg/kg	Number of examined	6	6	6	6	6	6
		No abnormality	6	6	6	6	6	6
	60 mg/kg	Number of examined	6	6	6	6	6	6
		No abnormality	6	6	6	6	6	6
	300 mg/kg	Number of examined	6	6	6	6	6	6
		No abnormality	6	6	6	6	6	6
		Hypoactivity	0	0	0	0	0	0
		Tremor	0	0	0	0	0	0

Table 2 Body weights in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Sex	Group and dose	Body weight(g) on day									
		1	4	8	11	15	18	22	25	29	32
Male	Control	N	12	12	12	11	11	5	5	5	5
		Mean	11.7	18.4	29.3	36.7	46.7	58.4	82.8	105.3	145.4
		S.D.	±0.4	±1.1	±2.1	±2.3	±3.7	±4.8	±3.6	±4.6	±8.2
	12 mg/kg	N	12	12	12	12	12	6	6	6	6
		Mean	11.7	18.6	29.3	37.4	47.6	59.5	86.0	108.7	148.3
		S.D.	±0.6	±1.3	±2.2	±3.6	±4.9	±5.9	±5.1	±6.2	±8.0
	60 mg/kg	N	12	12	12	12	12	6	6	6	6
		Mean	11.7	18.3	29.1	37.1	46.9	59.0	84.9	107.7	144.7
		S.D.	±0.5	±1.0	±2.3	±3.2	±4.1	±5.2	±4.3	±5.1	±7.5
	300 mg/kg	N	12	12	12	12	12	6	6	6	6
		Mean	11.6	18.1	28.0	35.1	45.2	57.5	81.4	103.9	140.0
		S.D.	±0.5	±1.0	±2.2	±3.1	±3.9	±4.5	±4.4	±6.5	±10.4
24	Female	Control	N	12	12	12	12	12	6	6	6
		Mean	10.6	16.6	27.0	34.6	44.7	55.7	78.4	97.3	128.3
		S.D.	±0.6	±1.3	±2.7	±3.7	±4.9	±6.5	±3.6	±4.9	±6.8
	12 mg/kg	N	12	12	12	12	12	6	6	6	6
		Mean	10.6	16.8	27.0	34.5	44.4	55.8	78.6	97.9	127.1
		S.D.	±0.7	±1.4	±2.3	±3.1	±4.5	±5.3	±4.1	±3.9	±4.3
	60 mg/kg	N	12	12	12	12	12	6	6	6	6
		Mean	10.6	16.6	26.9	34.4	43.7	54.5	76.2	95.7	123.9
		S.D.	±0.6	±1.2	±2.4	±3.1	±4.4	±4.8	±2.1	±3.5	±4.5
	300 mg/kg	N	12	12	12	12	12	6	6	6	6
		Mean	10.7	16.6	26.5	33.9	43.5	54.9	78.9	99.0	129.9
		S.D.	±0.6	±1.3	±2.4	±3.3	±5.4	±6.6	±3.2	±3.1	±4.5

Not significantly different from control.

Table 2 - continued Body weights in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Sex	Group and dose	Body weight(g) on day									
		36	39	43	46	50	53	57	60	64	67
Male	Control	N	5	5	5	5	5	5	5	5	5
		Mean	223.3	253.8	295.5	325.7	366.1	396.5	427.3	447.9	474.2
		S.D.	±14.4	±18.1	±22.9	±24.1	±26.0	±28.6	±31.9	±34.1	±38.5
	12 mg/kg	N	6	6	6	6	6	6	6	6	6
		Mean	219.1	247.8	284.7	311.9	347.6	373.0	400.4	418.5	442.0
		S.D.	±16.0	±16.8	±20.2	±23.0	±24.0	±26.4	±27.5	±25.3	±25.9
	60 mg/kg	N	6	6	6	6	6	6	6	6	6
		Mean	215.1	243.7	278.5	308.0	345.1	371.6	400.8	421.4	444.4
		S.D.	±11.6	±13.8	±18.1	±17.6	±22.0	±26.3	±31.2	±32.5	±35.8
	300 mg/kg	N	6	6	6	6	6	6	6	6	6
		Mean	206.9	234.2	270.2	297.9	337.2	363.5	391.9	411.4	433.6
		S.D.	±18.4	±20.4	±26.7	±28.7	±33.1	±34.1	±37.1	±39.0	±40.9
25	Female	Control	N	6	6	6	6	6	6	6	6
		Mean	173.2	189.0	205.1	216.3	232.0	245.4	259.1	263.7	274.0
		S.D.	±11.1	±13.6	±16.8	±16.0	±20.1	±23.0	±25.6	±25.5	±25.7
	12 mg/kg	N	6	6	6	6	6	6	6	6	6
		Mean	171.4	186.4	201.7	211.2	224.2	232.4	244.7	252.3	262.7
		S.D.	±6.4	±8.2	±9.4	±11.9	±13.9	±19.6	±22.6	±18.1	±19.1
	60 mg/kg	N	6	6	6	6	6	6	6	6	6
		Mean	169.1	181.2	194.4	201.7	215.4	226.4	238.5	249.0	258.6
		S.D.	±6.9	±7.8	±7.9	±12.2	±16.1	±13.0	±12.3	±14.4	±17.8
	300 mg/kg	N	6	6	6	6	6	6	6	6	6
		Mean	175.2	187.2	202.5	212.7	227.6	239.1	249.6	258.1	267.0
		S.D.	±6.5	±7.4	±9.5	±15.3	±16.7	±19.7	±20.8	±21.3	±22.9

Not significantly different from control.

Table 2 - continued Body weights in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Sex	Group and dose	Body weight(g) on day			
		71	74	78	81
Male	Control	N	5	5	5
		Mean	514.4	527.9	543.9
		S.D.	±39.6	±41.8	±38.4
	12 mg/kg	N	6	6	6
		Mean	474.1	484.6	494.0
		S.D.	±28.0	±30.4	±27.5
	60 mg/kg	N	6	6	6
		Mean	481.1	492.6	502.5
		S.D.	±41.4	±42.7	±40.7
	300 mg/kg	N	6	6	6
		Mean	473.6	483.0	496.1
		S.D.	±44.9	±45.3	±44.7
Female	Control	N	6	6	6
		Mean	289.7	296.0	302.2
		S.D.	±24.9	±27.8	±26.9
	12 mg/kg	N	6	6	6
		Mean	277.6	281.8	288.5
		S.D.	±24.7	±25.6	±26.9
	60 mg/kg	N	6	6	6
		Mean	268.8	271.1	274.0
		S.D.	±16.1	±18.6	±20.9
	300 mg/kg	N	6	6	6
		Mean	282.4	284.4	287.6
		S.D.	±21.0	±27.7	±27.9

Not significantly different from control.

Table 3 Food consumption in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Sex	Group and dose	Food consumption(g) on day									
		22	25	29	32	36	39	43	46	50	53
Male	Control	N	5	5	5	5	5	5	5	5	5
		Mean	11.1	14.8	19.1	22.4	26.5	26.5	28.7	31.1	31.2
		S.D.	±0.8	±1.4	±1.5	±2.2	±1.4	±2.7	±2.2	±2.6	±1.6
	12 mg/kg	N	6	6	6	6	6	6	6	6	6
		Mean	11.4	15.3	19.9	22.8	24.4	26.2	27.1	27.8	28.6
		S.D.	±0.7	±1.3	±1.9	±3.1	±3.1	±3.2	±2.9	±2.5	±1.5
	60 mg/kg	N	6	6	6	6	6	6	6	6	6
		Mean	11.6	15.1	18.5	22.1	24.8	25.9	26.1	28.8	29.8
		S.D.	±1.0	±1.1	±1.0	±1.1	±2.4	±2.5	±2.9	±2.0	±2.4
	300 mg/kg	N	6	6	6	6	6	6	6	6	6
		Mean	12.0	15.1	19.8	22.0	24.5	25.6	27.1	29.4	30.9
		S.D.	±0.7	±1.1	±1.6	±3.0	±3.1	±2.8	±3.5	±3.2	±4.1
Female	Control	N	6	6	6	6	6	6	6	6	6
		Mean	10.5	13.4	16.6	17.8	19.1	19.3	19.9	20.1	20.0
		S.D.	±1.1	±1.4	±1.4	±1.1	±2.1	±2.0	±1.6	±2.1	±2.7
	12 mg/kg	N	6	6	6	6	6	6	6	6	6
		Mean	10.7	13.6	16.7	18.3	18.9	20.4	19.5	20.7	21.2
		S.D.	±0.6	±1.2	±1.6	±2.0	±1.6	±1.5	±1.6	±2.1	±2.4
	60 mg/kg	N	6	6	6	6	6	6	6	6	6
		Mean	10.4	13.5	16.6	17.9	19.5	19.6	19.1	18.3	18.4
		S.D.	±0.6	±1.5	±1.3	±1.8	±2.0	±1.3	±2.1	±3.5	±4.0
	300 mg/kg	N	6	6	6	6	6	6	6	6	6
		Mean	10.9	13.7	17.6	18.5	19.1	18.0	19.0	19.3	19.0
		S.D.	±0.4	±0.4	±1.0	±1.1	±1.2	±0.9	±2.3	±4.6	±3.6

Not significantly different from control.

Table 3 - continued Food consumption in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Sex	Group and dose	Food consumption(g) on day							
		57	60	64	67	71	74	78	81
Male	Control	N	5	5	5	5	5	5	5
		Mean	32.9	32.7	33.4	33.5	32.6	33.8	33.2
		S.D.	±2.8	±2.2	±2.2	±2.7	±2.4	±2.4	±3.0
	12 mg/kg	N	6	6	6	6	6	6	6
		Mean	28.7*	29.2	29.0	28.2*	29.8	28.4*	27.9**
	60 mg/kg	N	6	6	6	6	6	6	6
		Mean	30.7	30.6	31.1	29.6	30.4	30.1	29.9
	300 mg/kg	N	6	6	6	6	6	6	6
		Mean	31.2	31.9	30.9	30.5	32.2	31.1	29.1
		S.D.	±3.0	±4.4	±3.5	±4.3	±3.8	±3.1	±2.6
Female	Control	N	6	6	6	6	6	6	6
		Mean	21.9	20.2	20.6	21.4	21.2	21.6	20.5
		S.D.	±2.4	±1.6	±2.1	±1.9	±1.6	±3.1	±2.4
	12 mg/kg	N	6	6	6	6	6	6	6
		Mean	20.0	20.0	21.0	20.9	20.8	20.6	20.2
	60 mg/kg	N	6	6	6	6	6	6	6
		Mean	20.3	23.2	23.1	20.1	20.6	17.9	18.4
	300 mg/kg	N	6	6	6	6	6	6	6
		Mean	18.9	20.7	20.5	21.3	21.4	19.2	19.2
		S.D.	±3.4	±3.6	±3.1	±2.5	±2.0	±5.1	±2.3

\*: P<0.05, \*\*: P<0.01 (significantly different from control).

Table 4 Postnatal differentiation in F<sub>1</sub> offspring

Study No. 49815

Group and dose	Control	12 mg/kg	60 mg/kg	300 mg/kg
No. of male offspring				
Pinna detachment ( 4 days)	12/12 ( 100 )	12/12 ( 100 )	12/12 ( 100 )	12/12 ( 100 )
Piliation ( 8 days)	12/12 ( 100 )	12/12 ( 100 )	12/12 ( 100 )	12/12 ( 100 )
Incisor eruption (10 days)	12/12 ( 100 )	11/12 (91.67)	12/12 ( 100 )	11/12 (91.67)
(11 days)	-	11/12 (91.67)	-	12/12 ( 100 )
(12 days)	-	12/12 ( 100 )	-	-
Eyelid separation (15 days)	11/11 ( 100 )	12/12 ( 100 )	12/12 ( 100 )	12/12 ( 100 )
Gait (15 days)	11/11 ( 100 )	12/12 ( 100 )	12/12 ( 100 )	12/12 ( 100 )
Descensus testis (21 days)	11/11 ( 100 )	12/12 ( 100 )	12/12 ( 100 )	12/12 ( 100 )
Cleavage of the balanopreputial gland				
(42 days)	2/5 (40.00)	2/6 (33.33)	2/6 (33.33)	1/6 (16.67)
(43 days)	4/5 (80.00)	2/6 (33.33)	2/6 (33.33)	4/6 (66.67)
(44 days)	4/5 (80.00)	3/6 (50.00)	2/6 (33.33)	4/6 (66.67)
(45 days)	5/5 ( 100 )	4/6 (66.67)	4/6 (66.67)	5/6 (83.33)
(46 days)	-	4/6 (66.67)	4/6 (66.67)	5/6 (83.33)
(47 days)	-	5/6 (83.33)	4/6 (66.67)	5/6 (83.33)
(48 days)	-	6/6 ( 100 )	4/6 (66.67)	6/6 ( 100 )
(49 days)	-	-	5/6 (83.33)	-
(50 days)	-	-	5/6 (83.33)	-
(51 days)	-	-	5/6 (83.33)	-
(52 days)	-	-	5/6 (83.33)	-
(53 days)	-	-	5/6 (83.33)	-
(54 days)	-	-	6/6 ( 100 )	-
No. of female offspring				
Pinna detachment ( 4 days)	12/12 ( 100 )	12/12 ( 100 )	12/12 ( 100 )	12/12 ( 100 )
Piliation ( 8 days)	12/12 ( 100 )	12/12 ( 100 )	12/12 ( 100 )	12/12 ( 100 )
Incisor eruption (10 days)	10/12 (83.33)	11/12 (91.67)	10/12 (83.33)	12/12 ( 100 )
(11 days)	12/12 ( 100 )	12/12 ( 100 )	12/12 ( 100 )	-
Eyelid separation (15 days)	12/12 ( 100 )	12/12 ( 100 )	12/12 ( 100 )	12/12 ( 100 )
Gait (15 days)	12/12 ( 100 )	12/12 ( 100 )	12/12 ( 100 )	12/12 ( 100 )
Vaginal opening (42 days)	6/6 ( 100 )	6/6 ( 100 )	5/6 (83.33)	6/6 ( 100 )
(43 days)	-	-	6/6 ( 100 )	-

Values in parentheses represent percentages to the number of offspring examined.

Not significantly different from control.

Table 5 Results of function test in F<sub>1</sub> offspring

Study No. 49815

Group and dose	Control	12 mg/kg	60 mg/kg	300 mg/kg
<b>No. of male offspring</b>				
Righting reflex (5 days)	11/12 (91.67)	10/12 (83.33)	10/12 (83.33)	11/12 (91.67)
(6 days)	11/12 (91.67)	12/12 (100)	12/12 (100)	12/12 (100)
(7 days)	12/12 (100)	-	-	-
Ipsilateral flexor reflex (5 days)	12/12 (100)	12/12 (100)	12/12 (100)	12/12 (100)
Visual placing (16 days)	11/11 (100)	12/12 (100)	12/12 (100)	12/12 (100)
Preyer's reflex 500 Hz(60 dB) (28 days)	5/5 (100)	6/6 (100)	6/6 (100)	6/6 (100)
Preyer's reflex 20000 Hz(60 dB) (28 days)	5/5 (100)	6/6 (100)	6/6 (100)	6/6 (100)
<b>No. of female offspring</b>				
Righting reflex (5 days)	11/12 (91.67)	9/12 (75.00)	6/12 (50.00)*	11/12 (91.67)
(6 days)	12/12 (100)	12/12 (100)	9/12 (75.00)	11/12 (91.67)
(7 days)	-	-	12/12 (100)	12/12 (100)
Ipsilateral flexor reflex (5 days)	12/12 (100)	12/12 (100)	12/12 (100)	12/12 (100)
Visual placing (16 days)	12/12 (100)	12/12 (100)	12/12 (100)	12/12 (100)
Preyer's reflex 500 Hz(60 dB) (28 days)	6/6 (100)	6/6 (100)	6/6 (100)	6/6 (100)
Preyer's reflex 20000 Hz(60 dB) (28 days)	6/6 (100)	6/6 (100)	6/6 (100)	6/6 (100)

\*: P&lt;0.05 (significantly different from control).

Values in parentheses represent percentages to the number of offspring examined.

Not significantly different from control.

Table 6 Urinary findings in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Sex	Group and dose	Urine volume		Osmotic pressure	Specific gravity
			(mL/24hr)	(Osm/kg)	
Male	Control	N	5	5	5
		Mean	29.7	1.106	1.035
		S. D.	±15.6	±0.414	±0.012
	12 mg/kg	N	6	6	6
		Mean	18.2	1.303	1.042
		S. D.	±5.7	±0.294	±0.010
	60 mg/kg	N	6	6	6
		Mean	24.0	1.260	1.044
		S. D.	±14.2	±0.618	±0.022
	300 mg/kg	N	6	6	6
		Mean	21.7	1.068	1.037
		S. D.	±6.9	±0.357	±0.014
Female	Control	N	6	6	6
		Mean	10.4	1.408	1.046
		S. D.	±6.9	±0.459	±0.015
	12 mg/kg	N	6	6	6
		Mean	9.6	1.411	1.047
		S. D.	±1.6	±0.183	±0.006
	60 mg/kg	N	6	6	6
		Mean	8.1	1.748	1.057
		S. D.	±3.6	±0.694	±0.020
	300 mg/kg	N	6	6	6
		Mean	7.6	1.612	1.052
		S. D.	±2.9	±0.497	±0.014

Not significantly different from control.

Table 6 - continued Urinary findings in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Sex	Group and dose	Number of animals	Color		pH						Protein				Glucose		Ketone body	
			PY	Y	6.0	6.5	7.0	7.5	8.0	8.5	-	±	+	++	-	-	-	
Male	Control	5	2	3	0	0	0	3	2	0	1	2	1	1	5	5		
	12 mg/kg	6	1	5	0	0	0	1	5	0	2	2	2	0	6	6		
	60 mg/kg	6	3	3	0	0	0	2	4	0	1	1	3	1	6	6		
	300 mg/kg	6	4	2	0	0	0	4	2	0	3	2	0	1	6	6		
Female	Control	6	2	4	0	0	2	0	4	0	5	0	1	0	6	6		
	12 mg/kg	6	0	6	0	2	0	2	1	1	4	1	1	0	6	6		
	60 mg/kg	6	0	6	1	0	0	2	2	1	4	2	0	0	6	6		
	300 mg/kg	6	0	6	1	1	0	1	3	0	6	0	0	0	6	6		

Abbreviation: PY, pale yellow; Y, yellow.

Grade sign: -, none; ±, trace; +, mild; ++, moderate; +++, marked; +++, very marked.

Table 6 - continued Urinary findings in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Sex	Group and dose	Number of animals	Bilirubin	Occult blood			Urobilinogen (mg/dL)
			-	-	+	+++	<1
Male	Control	5	5	5	0	0	5
	12 mg/kg	6	6	4	1	1	6
	60 mg/kg	6	6	5	0	1	6
	300 mg/kg	6	6	6	0	0	6
Female	Control	6	6	6	0	0	6
	12 mg/kg	6	6	6	0	0	6
	60 mg/kg	6	6	5	1	0	6
	300 mg/kg	6	6	6	0	0	6

Grade sign: -, none; ±, trace; +, mild; ++, moderate; +++, marked; +++, very marked.

Table 6 - continued Urinary findings in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Sex	Group and dose	Number of animals	Urinary sediment				
			-	-	-	-	- +
Male	Control	5	5	5	5	5	4 1
	12 mg/kg	6	6	6	6	6	6 0
	60 mg/kg	6	6	6	6	6	5 1
	300 mg/kg	6	6	6	6	6	6 0
Female	Control	6	6	6	6	6	6 0
	12 mg/kg	6	6	6	6	6	6 0
	60 mg/kg	6	6	6	6	6	6 0
	300 mg/kg	6	6	6	6	6	6 0

Grade signs are as follows.

Epithelial cells: -, < 3/field; +, 3/field  $\leq$  and < 10/field; ++, 10/field  $\leq$  and < 20/field; +++,  $\geq$  20/field.

Erythrocytes : -, < 10/field; +, 10/field  $\leq$  and < 30/field; ++, 30/field  $\leq$  and < 100/field; +++, countless.

Leukocytes : -, < 3/field; +, 3/field  $\leq$  and < 20/field; ++, 20/field  $\leq$  and < 40/field; +++,  $\geq$  40/field.

Casts : -, none; +,  $\geq$  1/all field.

Crystals : -, < 10/field; +, 10/field  $\leq$  and < 20/field; ++, 20/field  $\leq$  and < 30/field; +++, countless.

Table 7 Hematological findings in juvenile rats treated orally with 4-Chlorophenol for 18 days

Sex	Group and dose		Leukocytes (10 <sup>2</sup> / μL)	Erythrocytes (10 <sup>4</sup> / μL)	Hemoglobin (g/dL)	Hematocrit (%)	MCV (fL)	MCH (pg)	MCHC (%)	Platelets (10 <sup>4</sup> / μL)
Male	Control	N	6	6	6	6	6	6	6	6
		Mean	70	461	8.8	32.2	70	19.1	27.3	106.3
		S. D.	±10	±41	±0.8	±2.6	±1	±0.3	±0.6	±11.0
	12 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	70	446	8.5	30.8	69	19.1	27.7	110.9
		S. D.	±18	±17	±0.6	±1.9	±3	±1.0	±0.5	±7.3
	60 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	69	441	8.4	30.2	69	19.0	27.6	109.1
		S. D.	±18	±12	±0.7	±1.8	±3	±1.2	±0.6	±9.6
	300 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	71	444	8.6	31.2	70	19.3	27.5	113.1
		S. D.	±16	±13	±0.7	±1.9	±3	±1.3	±0.9	±8.7
Female	Control	N	6	6	6	6	6	6	6	6
		Mean	85	458	8.8	31.8	70	19.2	27.5	115.4
		S. D.	±13	±28	±0.5	±1.5	±3	±1.2	±0.4	±7.7
	12 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	63*	438	8.6	31.3	72	19.5	27.4	110.9
		S. D.	±13	±12	±0.4	±1.6	±2	±0.7	±0.7	±9.5
	60 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	75	465	8.9	32.3	70	19.1	27.4	106.4
		S. D.	±9	±24	±0.7	±1.8	±4	±1.6	±1.0	±8.4
	300 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	76	456	9.0	32.4	71	19.7	27.7	108.3
		S. D.	±17	±18	±0.4	±1.2	±3	±1.4	±1.1	±11.4

\*: P&lt;0.05 (significantly different from control).

Table 7 - continued      Hematological findings in juvenile rats treated orally with 4-Chlorophenol for 18 days

Sex	Group and dose	Differential leukocyte count					
		Eosinophil	Stab neutrophil	Segmented neutrophil	Lymphocyte	Basophil	Monocyte
		(%)	(%)	(%)	(%)	(%)	(%)
Male	Control	N	6	6	6	6	6
		Mean	0.3	0.7	12.0	84.7	0.0
		S.D.	±0.5	±0.8	±3.4	±3.9	±1.4
	12 mg/kg	N	6	6	6	6	6
		Mean	0.7	0.2	13.8	82.2	0.0
		S.D.	±1.0	±0.4	±3.7	±3.5	±1.5
	60 mg/kg	N	6	6	6	6	6
		Mean	0.0	0.3	14.3	81.8	0.0
		S.D.	±0.0	±0.5	±5.6	±6.7	±1.0
	300 mg/kg	N	6	6	6	6	6
		Mean	0.2	0.7	13.8	82.5	0.0
		S.D.	±0.4	±0.8	±4.9	±3.7	±1.7
Female	Control	N	6	6	6	6	6
		Mean	0.2	0.3	17.3	80.0	0.0
		S.D.	±0.4	±0.5	±3.9	±2.7	±1.2
	12 mg/kg	N	6	6	6	6	6
		Mean	0.5	0.7	15.8	80.5	0.0
		S.D.	±0.5	±1.0	±5.2	±4.4	±1.0
	60 mg/kg	N	6	6	6	6	6
		Mean	0.5	0.5	12.7	84.5	0.0
		S.D.	±0.5	±0.8	±3.7	±4.3	±2.1
	300 mg/kg	N	6	6	6	6	6
		Mean	0.2	0.5	15.8	81.5	0.0
		S.D.	±0.4	±0.8	±5.9	±5.6	±1.3

Not significantly different from control.

Table 8 Hematological findings in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Sex	Group and dose		Leukocytes (10 <sup>2</sup> / μL)	Erythrocytes (10 <sup>4</sup> / μL)	Hemoglobin (g/dL)	Hematocrit (%)	MCV (fL)	MCH (pg)	MCHC (%)	Platelets (10 <sup>4</sup> / μL)	PT (sec)	APTT (sec)
Male	Control	N	5	5	5	5	5	5	5	5	5	5
		Mean	92	869	15.4	48.6	56	17.8	31.7	98.9	13.6	21.5
		S. D.	±20	±24	±0.6	±1.2	±2	±0.8	±0.6	±9.3	±0.8	±3.3
	12 mg/kg	N	6	6	6	6	6	6	6	6	6	6
		Mean	111	847	15.2	48.4	57	18.0	31.5	93.5	16.0*	24.1
		S. D.	±28	±50	±0.7	±2.6	±1	±0.5	±0.6	±15.2	±2.1	±5.1
	60 mg/kg	N	6	6	6	6	6	6	6	6	6	6
		Mean	90	879	15.8	50.4	58	18.0	31.3	98.0	15.8	25.7
		S. D.	±16	±14	±0.3	±1.5	±2	±0.3	±0.5	±11.5	±1.5	±2.7
	300 mg/kg	N	6	6	6	6	6	6	6	6	6	6
		Mean	89	832	15.2	48.4	58*	18.3	31.4	98.7	15.0	25.9
		S. D.	±24	±31	±0.5	±1.7	±2	±0.7	±0.8	±10.4	±1.1	±3.3
Female	Control	N	6	6	6	6	6	6	6	6	6	6
		Mean	51	802	14.8	45.3	57	18.5	32.7	93.9	11.0	18.6
		S. D.	±7	±44	±0.6	±2.3	±3	±0.5	±1.4	±16.7	±0.9	±5.2
	12 mg/kg	N	6	6	6	6	6	6	6	6	6	6
		Mean	62	801	14.8	45.0	56	18.5	32.9	91.8	10.8	19.7
		S. D.	±21	±29	±0.5	±2.5	±3	±0.8	±1.6	±10.9	±0.6	±1.6
	60 mg/kg	N	6	6	6	6	6	6	6	6	6	6
		Mean	52	811	14.4	45.0	56	17.8	32.0	97.6	11.2	19.0
		S. D.	±9	±30	±0.4	±0.8	±2	±0.7	±0.4	±11.4	±0.7	±1.2
	300 mg/kg	N	6	6	6	6	6	6	6	6	6	6
		Mean	53	776	14.2	44.8	58	18.3	31.6	95.3	10.7	18.6
		S. D.	±12	±26	±0.6	±1.4	±3	±0.8	±0.7	±3.4	±0.5	±1.0

\*: P&lt;0.05 (significantly different from control).

Table 8 - continued Hematological findings in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Sex	Group and dose	Differential leukocyte count						
		Eosinophil	Stab neutrophil	Segmented neutrophil	Lymphocyte	Basophil	Monocyte	
		(%)	(%)	(%)	(%)	(%)	(%)	
Male	Control	N Mean S.D.	5 1.4 ±1.1	5 0.0 ±0.0	5 14.0 ±5.8	5 83.2 ±7.6	5 0.0 ±0.0	5 1.4 ±1.1
	12 mg/kg	N Mean S.D.	6 1.0 ±0.9	6 0.0 ±0.0	6 13.8 ±5.4	6 84.2 ±5.3	6 0.0 ±0.0	6 1.0 ±1.1
	60 mg/kg	N Mean S.D.	6 0.5 ±0.5	6 0.0 ±0.0	6 10.5 ±4.4	6 87.2 ±5.3	6 0.0 ±0.0	6 1.8 ±1.5
	300 mg/kg	N Mean S.D.	6 1.3 ±1.0	6 0.0 ±0.0	6 11.8 ±8.6	6 85.8 ±9.9	6 0.0 ±0.0	6 1.0 ±0.6
♀	Control	N Mean S.D.	6 0.7 ±0.8	6 0.0 ±0.0	6 10.3 ±4.8	6 87.7 ±6.0	6 0.0 ±0.0	6 1.3 ±1.2
	12 mg/kg	N Mean S.D.	6 1.2 ±1.0	6 0.0 ±0.0	6 17.8 ±8.4	6 79.8 ±9.2	6 0.0 ±0.0	6 1.2 ±0.8
	60 mg/kg	N Mean S.D.	6 0.8 ±1.2	6 0.0 ±0.0	6 16.8 ±6.6	6 80.8 ±7.6	6 0.0 ±0.0	6 1.5 ±1.4
	300 mg/kg	N Mean S.D.	6 0.8 ±1.2	6 0.0 ±0.0	6 13.8 ±5.7	6 84.5 ±7.3	6 0.0 ±0.0	6 0.8 ±1.6

Not significantly different from control.

Table 9 Biochemical findings in juvenile rats treated orally with 4-Chlorophenol for 18 days

Sex	Group and dose	T. Protein (g/dL)	Albumin (g/dL)	A/G ratio	T. Bilirubin (mg/dL)	GOT (IU/L)	GPT (IU/L)	$\gamma$ -GTP (IU/L)	ALP (IU/L)	Cholinesterase (IU/L)
Male	Control	N	6	6	6	6	6	6	6	6
		Mean	4.1	3.2	3.47	0.0	128	27	955	89
		S.D.	$\pm 0.2$	$\pm 0.1$	$\pm 0.36$	$\pm 0.1$	$\pm 59$	$\pm 7$	$\pm 224$	$\pm 19$
	12 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	4.2	3.2	3.19	0.0	100	24	924	77
		S.D.	$\pm 0.2$	$\pm 0.2$	$\pm 0.49$	$\pm 0.0$	$\pm 11$	$\pm 3$	$\pm 136$	$\pm 14$
	60 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	4.2	3.2	3.40	0.0	127	25	892	76
		S.D.	$\pm 0.3$	$\pm 0.2$	$\pm 0.42$	$\pm 0.0$	$\pm 72$	$\pm 7$	$\pm 141$	$\pm 8$
	300 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	4.3	3.3	3.63	0.0	97	23	826	76
		S.D.	$\pm 0.3$	$\pm 0.2$	$\pm 0.50$	$\pm 0.1$	$\pm 11$	$\pm 3$	$\pm 123$	$\pm 7$
Female	Control	N	6	6	6	6	6	6	6	6
		Mean	4.2	3.2	3.31	0.0	136	26	915	91
		S.D.	$\pm 0.2$	$\pm 0.2$	$\pm 0.47$	$\pm 0.1$	$\pm 45$	$\pm 6$	$\pm 257$	$\pm 11$
	12 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	4.1	3.2	3.45	0.0	112	24	769	86
		S.D.	$\pm 0.2$	$\pm 0.2$	$\pm 0.48$	$\pm 0.0$	$\pm 17$	$\pm 3$	$\pm 164$	$\pm 10$
	60 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	4.1	3.2	3.30	0.0	132	25	833	74*
		S.D.	$\pm 0.2$	$\pm 0.1$	$\pm 0.29$	$\pm 0.0$	$\pm 48$	$\pm 4$	$\pm 79$	$\pm 4$
	300 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	4.3	3.4	3.72	0.0	105	22	793	85
		S.D.	$\pm 0.3$	$\pm 0.2$	$\pm 0.49$	$\pm 0.0$	$\pm 16$	$\pm 2$	$\pm 134$	$\pm 10$

\*: P<0.05 (significantly different from control).

Table 9 - continued Biochemical findings in juvenile rats treated orally with 4-Chlorophenol for 18 days

Sex	Group and dose		Acetylcholinesterase (ΔpH)	T. Cholesterol (mg/dL)	Triglycerides (mg/dL)	Phospholipids (mg/dL)	Glucose (mg/dL)	BUN (mg/dL)	Creatinine (mg/dL)	IP (mg/dL)
Male	Control	N	6	6	6	6	6	6	6	6
		Mean	0.09	100	129	205	157	16.1	0.3	10.7
		S. D.	±0.02	±4	±106	±29	±16	±3.5	±0.1	±0.5
	12 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	0.08	102	130	209	157	16.0	0.4	10.8
		S. D.	±0.01	±10	±53	±34	±10	±1.2	±0.1	±0.4
	60 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	0.08	94	98	191	149	14.8	0.3	10.9
		S. D.	±0.01	±20	±26	±34	±14	±2.2	±0.0	±0.7
	300 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	0.08	90	103	192	151	16.1	0.3	10.5
		S. D.	±0.01	±8	±42	±29	±13	±2.5	±0.0	±0.4
Female	Control	N	6	6	6	6	6	6	6	6
		Mean	0.09	102	88	206	153	15.8	0.4	10.2
		S. D.	±0.01	±15	±25	±32	±9	±1.8	±0.1	±0.6
	12 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	0.08	97	77	200	155	15.8	0.3	9.9
		S. D.	±0.01	±18	±10	±36	±17	±2.0	±0.0	±0.3
	60 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	0.08	100	92	198	155	15.1	0.3	10.2
		S. D.	±0.01	±15	±21	±24	±11	±1.4	±0.1	±0.6
	300 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	0.08	99	68	196	151	15.1	0.4	9.8
		S. D.	±0.01	±13	±31	±24	±11	±2.1	±0.1	±0.5

Not significantly different from control.

Table 9 - continued Biochemical findings in juvenile rats treated orally with 4-Chlorophenol for 18 days

Sex	Group and dose		Ca (mg/dL)	Na (mEq/L)	K (mEq/L)	Cl (mEq/L)
Male	Control	N	6	6	6	6
		Mean	11.4	143.4	5.06	105.6
		S.D.	±0.4	±0.9	±0.32	±1.2
	12 mg/kg	N	6	6	6	6
		Mean	11.5	143.3	5.01	106.7
		S.D.	±0.3	±0.6	±0.32	±1.9
	60 mg/kg	N	6	6	6	6
		Mean	11.2	143.4	5.28	106.6
		S.D.	±0.1	±1.2	±0.57	±2.2
	300 mg/kg	N	6	6	6	6
		Mean	11.6	144.3	4.92	105.3
		S.D.	±0.3	±1.8	±0.50	±1.8
Female	Control	N	6	6	6	6
		Mean	11.1	143.2	4.86	105.9
		S.D.	±0.3	±1.2	±0.33	±1.9
	12 mg/kg	N	6	6	6	6
		Mean	11.1	143.7	4.68	107.3
		S.D.	±0.3	±1.3	±0.34	±1.5
	60 mg/kg	N	6	6	6	6
		Mean	11.0	143.5	4.84	106.4
		S.D.	±0.4	±1.0	±0.28	±1.6
	300 mg/kg	N	6	6	6	6
		Mean	11.0	143.6	4.80	107.1
		S.D.	±0.1	±1.1	±0.36	±1.7

Not significantly different from control.

Table 10 Biochemical findings in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Sex	Group and dose	T. Protein (g/dL)	Albumin (g/dL)	A/G ratio	T. Bilirubin (mg/dL)	GOT (IU/L)	GPT (IU/L)	$\gamma$ -GTP (IU/L)	ALP (IU/L)	Cholinesterase (IU/L)
Male	Control	N	5	5	5	5	5	5	5	5
		Mean	5.5	3.7	2.13	0.0	91	21	237	97
		S.D.	$\pm 0.3$	$\pm 0.2$	$\pm 0.11$	$\pm 0.0$	$\pm 10$	$\pm 4$	$\pm 41$	$\pm 27$
	12 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	5.3	3.7	2.24	0.0	79	22	209	62
		S.D.	$\pm 0.3$	$\pm 0.2$	$\pm 0.17$	$\pm 0.0$	$\pm 8$	$\pm 8$	$\pm 21$	$\pm 7$
	60 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	5.6	3.8	2.10	0.0	84	20	209	64
		S.D.	$\pm 0.2$	$\pm 0.2$	$\pm 0.17$	$\pm 0.0$	$\pm 9$	$\pm 3$	$\pm 37$	$\pm 7$
	300 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	5.3	3.7	2.18	0.0	88	21	216	58
		S.D.	$\pm 0.2$	$\pm 0.1$	$\pm 0.18$	$\pm 0.0$	$\pm 9$	$\pm 2$	$\pm 42$	$\pm 15$
Female	Control	N	6	6	6	6	6	6	6	6
		Mean	5.8	4.2	2.56	0.0	84	16	139	458
		S.D.	$\pm 0.3$	$\pm 0.3$	$\pm 0.53$	$\pm 0.0$	$\pm 6$	$\pm 4$	$\pm 40$	$\pm 173$
	12 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	5.8	4.2	2.66	0.1	81	16	116	523
		S.D.	$\pm 0.5$	$\pm 0.4$	$\pm 0.31$	$\pm 0.1$	$\pm 11$	$\pm 3$	$\pm 24$	$\pm 167$
	60 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	5.9	4.3	2.76	0.0	81	17	112	490
		S.D.	$\pm 0.4$	$\pm 0.4$	$\pm 0.42$	$\pm 0.1$	$\pm 12$	$\pm 2$	$\pm 22$	$\pm 135$
	300 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	5.9	4.3	2.82	0.1	89	18	122	576
		S.D.	$\pm 0.2$	$\pm 0.2$	$\pm 0.40$	$\pm 0.1$	$\pm 13$	$\pm 4$	$\pm 23$	$\pm 129$

Not significantly different from control.

Table 10 - continued

Biochemical findings in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Sex	Group and dose		Acetylcholinesterase (ΔpH)	T. Cholesterol (mg/dL)	Triglycerides (mg/dL)	Phospholipids (mg/dL)	Glucose (mg/dL)	BUN (mg/dL)	Creatinine (mg/dL)	IP (mg/dL)
Male	Control	N	5	5	5	5	5	5	5	5
		Mean	0.08	60	60	106	142	15.5	0.5	7.4
		S.D.	±0.03	±8	±31	±7	±11	±1.5	±0.0	±0.2
	12 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	0.05	51	64	97	130	15.9	0.4*	7.0
		S.D.	±0.00	±7	±17	±12	±8	±1.8	±0.0	±0.4
	60 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	0.05	52	62	99	137	15.1	0.4	6.7**
		S.D.	±0.01	±6	±13	±11	±18	±0.9	±0.1	±0.4
	300 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	0.05	55	63	103	132	14.8	0.5	7.0
		S.D.	±0.02	±5	±29	±9	±23	±1.2	±0.1	±0.3
Female	Control	N	6	6	6	6	6	6	6	6
		Mean	0.42	59	19	120	96	19.1	0.5	6.8
		S.D.	±0.16	±10	±6	±12	±22	±2.6	±0.1	±1.2
	12 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	0.48	68	21	135	99	18.8	0.5	6.8
		S.D.	±0.15	±11	±7	±19	±10	±3.0	±0.1	±1.1
	60 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	0.45	65	26	133	112	17.8	0.5	6.5
		S.D.	±0.12	±11	±16	±21	±13	±1.1	±0.1	±0.8
	300 mg/kg	N	6	6	6	6	6	6	6	6
		Mean	0.52	73	34	146	113	19.2	0.5	6.4
		S.D.	±0.13	±12	±15	±21	±13	±1.2	±0.0	±0.5

\*: P&lt;0.05, \*\*: P&lt;0.01 (significantly different from control).

Table 10 - continued

Biochemical findings in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Sex	Group and dose		Ca (mg/dL)	Na (mEq/L)	K (mEq/L)	Cl (mEq/L)
Male	Control	N	5	5	5	5
		Mean	9.8	146.2	4.26	103.0
		S.D.	±0.1	±0.8	±0.16	±0.7
	12 mg/kg	N	6	6	6	6
		Mean	9.6	146.3	4.21	105.5**
		S.D.	±0.6	±1.3	±0.20	±1.2
	60 mg/kg	N	6	6	6	6
		Mean	9.8	146.8	4.25	104.5
		S.D.	±0.3	±0.9	±0.15	±1.1
	300 mg/kg	N	6	6	6	6
		Mean	9.4	146.1	4.21	104.9*
		S.D.	±0.4	±0.6	±0.11	±1.2
Female	Control	N	6	6	6	6
		Mean	9.8	146.2	4.64	107.5
		S.D.	±0.4	±1.1	±1.34	±1.5
	12 mg/kg	N	6	6	6	6
		Mean	9.7	145.7	4.21	107.5
		S.D.	±0.4	±1.1	±0.33	±1.7
	60 mg/kg	N	6	6	6	6
		Mean	9.8	145.4	4.00	106.6
		S.D.	±0.2	±0.6	±0.38	±1.2
	300 mg/kg	N	6	6	6	6
		Mean	9.8	145.6	4.14	106.3
		S.D.	±0.2	±0.4	±0.17	±1.3

\*: P&lt;0.05, \*\*: P&lt;0.01 (significantly different from control).

Table 11 Necropsy findings in juvenile rats treated orally with 4-Chlorophenol for 18 days

Organs and findings	Sex	Male												
		Control			12 mg/kg			60 mg/kg			300 mg/kg			
		Necropsy timing	Scheduled	Dead	Total	Scheduled	Dead	Total	Scheduled	Dead	Total	Scheduled	Dead	
	Number of animals		6	1	7	6	0	6	6	0	6	6	0	6
Respiratory system														
Lung														
Macule, dark red			0	1	1	0	0	0	0	0	0	0	0	0
Others														
Thoracic cavity														
Retention, fluid, oily			0	1	1	0	0	0	0	0	0	0	0	0

No appreciable changes in all other organs and tissues.

Table 11 - continued

## Necropsy findings in juvenile rats treated orally with 4-Chlorophenol for 18 days

Organs and findings	Sex	Female											
		Control			12 mg/kg			60 mg/kg			300 mg/kg		
		Necropsy timing	Scheduled	Dead	Total	Scheduled	Dead	Total	Scheduled	Dead	Total	Scheduled	Dead
	Number of animals		6	0	6		6	0	6		6		6
Respiratory system													
Lung													
Macule, dark red			0	0	0	0	0	0	0	0	0	0	0
Others													
Thoracic cavity													
Retention, fluid, oily			0	0	0	0	0	0	0	0	0	0	0

No appreciable changes in all other organs and tissues.

Table 12 Necropsy findings in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Organs and findings	Sex	Male											
		Control			12 mg/kg			60 mg/kg			300 mg/kg		
		Scheduled	Dead	Total									
	Number of animals	5	0	5	6	0	6	6	0	6	6	0	6
Urinary system													
Kidney													
Dilatation, pelvic cavity		1	0	1	0	0	0	0	0	0	0	0	0
Nodule, light gray		0	0	0	0	0	0	0	0	0	0	0	0
Genital system													
Testis													
Softening		0	0	0	0	0	0	0	0	0	1	0	1
Endocrine system													
Adrenal													
Enlargement		1	0	1	0	0	0	0	0	0	0	0	0

No appreciable changes in all other organs and tissues.

Table 12 - continued

Necropsy findings in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Organs and findings	Number of animals	Female											
		Control			12 mg/kg			60 mg/kg			300 mg/kg		
		Necropsy timing			Scheduled	Dead	Total	Scheduled	Dead	Total	Scheduled	Dead	Total
		6	0	6	6	0	6	6	0	6	6	0	6
Urinary system													
Kidney													
Dilatation, pelvic cavity	1	0	0	1	0	0	0	0	0	0	0	0	0
Nodule, light gray													
Genital system													
Testis	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Softening													
Endocrine system													
Adrenal													
Enlargement	0	0	0	0	0	0	0	0	0	0	0	0	0

NA, not applicable.

No appreciable changes in all other organs and tissues.

Table 13 Organ weights in juvenile rats treated orally with 4-Chlorophenol for 18 days

Sex	Group and dose	Final body weight		Brain		Pituitary		Thyroids		Heart	
		(g)	(g)	(g/100gB. W.)	(mg)	(mg/100gB. W.)	(mg)	(mg/100gB. W.)	(mg)	(mg/100gB. W.)	
Male	Control	N	6	6	6	6	6	6	6	6	6
		Mean	61.4	1.61	2.64	2.2	3.6	7.0	11.4	343.4	558.7
		S.D.	±6.0	±0.04	±0.23	±0.4	±0.5	±0.9	±1.4	±53.1	±55.9
	12 mg/kg	N	6	6	6	6	6	6	6	6	6
		Mean	60.8	1.62	2.68	2.5	4.1	7.1	11.6	352.4	578.8
		S.D.	±6.0	±0.05	±0.21	±0.4	±0.8	±1.8	±2.2	±46.1	±32.2
	60 mg/kg	N	6	6	6	6	6	6	6	6	6
		Mean	61.0	1.61	2.64	2.5	4.0	6.7	11.1	341.4	560.9
		S.D.	±5.2	±0.08	±0.14	±0.3	±0.4	±0.9	±2.2	±27.9	±32.7
	300 mg/kg	N	6	6	6	6	6	6	6	6	6
		Mean	60.7	1.58	2.62	2.3	3.8	7.1	11.7	349.3	576.5
		S.D.	±4.8	±0.04	±0.17	±0.4	±0.6	±1.0	±1.9	±24.3	±21.9
Female	Control	N	6	6	6	6	6	6	6	6	6
		Mean	56.1	1.51	2.73	2.8	4.9	5.8	10.5	309.6	553.7
		S.D.	±7.3	±0.05	±0.31	±0.5	±0.7	±0.7	±1.3	±32.0	±26.7
	12 mg/kg	N	6	6	6	6	6	6	6	6	6
		Mean	57.1	1.54	2.73	2.8	5.0	6.6	11.7	326.1	572.0
		S.D.	±5.9	±0.05	±0.34	±0.5	±0.8	±0.4	±1.2	±32.4	±17.5
	60 mg/kg	N	6	6	6	6	6	6	6	6	6
		Mean	55.9	1.53	2.75	2.6	4.6	7.3	12.9*	291.5	521.1
		S.D.	±5.6	±0.06	±0.22	±0.5	±0.7	±1.6	±2.0	±38.9	±33.5
	300 mg/kg	N	6	6	6	6	6	6	6	6	6
		Mean	55.7	1.50	2.72	2.7	4.8	6.6	11.8	295.7	532.2
		S.D.	±7.6	±0.09	±0.27	±0.3	±0.3	±1.3	±1.6	±38.4	±22.3

\*: P&lt;0.05 (significantly different from control).

Table 13 - continued      Organ weights in juvenile rats treated orally with 4-Chlorophenol for 18 days

Sex	Group and dose	Lungs		Thymus		Liver		Spleen		
		(mg)	(mg/100gB. W.)	(mg)	(mg/100gB. W.)	(g)	(g/100gB. W.)	(mg)	(mg/100gB. W.)	
Male	Control	N Mean S.D.	6 495.5 ±67.2	6 806.1 ±54.8	6 230.7 ±55.2	6 371.7 ±58.7	6 2.64 ±0.43	6 4.29 ±0.34	6 289.7 ±60.3	6 468.7 ±65.8
	12 mg/kg	N Mean S.D.	6 483.0 ±35.6	6 797.2 ±40.3	6 256.4 ±25.8	6 422.5 ±28.9	6 2.62 ±0.27	6 4.31 ±0.24	6 289.0 ±43.2	6 477.8 ±75.2
	60 mg/kg	N Mean S.D.	6 498.0 ±43.6	6 818.6 ±62.5	6 259.5 ±47.0	6 424.8 ±64.0	6 2.64 ±0.19	6 4.33 ±0.16	6 288.7 ±35.5	6 474.4 ±53.4
	300 mg/kg	N Mean S.D.	6 490.9 ±42.2	6 808.8 ±13.1	6 264.5 ±44.7	6 433.6 ±47.0	6 2.90 ±0.31	6 4.78** ±0.22	6 266.2 ±54.0	6 437.8 ±77.0
Female	Control	N Mean S.D.	6 459.3 ±78.6	6 827.9 ±166.8	6 269.1 ±43.8	6 479.4 ±51.0	6 2.38 ±0.43	6 4.23 ±0.24	6 257.8 ±50.2	6 459.4 ±70.0
	12 mg/kg	N Mean S.D.	6 459.2 ±37.7	6 807.4 ±47.5	6 259.5 ±21.7	6 456.7 ±37.5	6 2.48 ±0.24	6 4.36 ±0.20	6 261.2 ±54.3	6 457.7 ±83.7
	60 mg/kg	N Mean S.D.	6 451.5 ±45.4	6 809.7 ±52.0	6 232.2 ±30.3	6 416.1 ±40.0	6 2.36 ±0.20	6 4.24 ±0.21	6 277.2 ±24.8	6 497.6 ±29.1
	300 mg/kg	N Mean S.D.	6 445.7 ±65.2	6 800.1 ±15.5	6 245.9 ±45.9	6 440.7 ±55.1	6 2.71 ±0.46	6 4.85** ±0.30	6 232.4 ±44.6	6 416.0 ±38.5

\*\*: P&lt;0.01 (significantly different from control).

Table 13 - continued      Organ weights in juvenile rats treated orally with 4-Chlorophenol for 18 days

Sex	Group and dose	Kidneys		Adrenals		Epididymides		Testes	
		(g)	(g/100gB. W.)	(mg)	(mg/100gB. W.)	(mg)	(mg/100gB. W.)	(mg)	(mg/100gB. W.)
Male	Control	N	6	6	6	6	6	6	6
		Mean	0.68	1.10	16.4	26.7	53.4	86.8	301.3
		S.D.	±0.10	±0.07	±2.5	±2.3	±7.3	±5.5	±32.2
	12 mg/kg	N	6	6	6	6	6	6	6
		Mean	0.68	1.12	16.9	27.8	54.2	89.8	298.7
		S.D.	±0.06	±0.04	±2.2	±1.7	±5.0	±11.2	±15.2
	60 mg/kg	N	6	6	6	6	6	6	6
		Mean	0.70	1.14	16.0	26.3	54.6	89.5	304.5
		S.D.	±0.12	±0.12	±1.5	±2.0	±8.2	±10.1	±16.2
	300 mg/kg	N	6	6	6	6	6	6	6
		Mean	0.68	1.11	16.3	26.8	51.0	84.6	294.9
		S.D.	±0.08	±0.07	±1.7	±2.2	±3.4	±9.7	±20.9
Female	Control	N	6	6	6	6			
		Mean	0.61	1.09	15.5	27.4			
		S.D.	±0.05	±0.06	±3.2	±2.5			
	12 mg/kg	N	6	6	6	6			
		Mean	0.64	1.12	15.9	27.9			
		S.D.	±0.03	±0.08	±1.8	±2.1			
	60 mg/kg	N	6	6	6	6			
		Mean	0.56	1.01	15.6	27.9			
		S.D.	±0.07	±0.13	±1.2	±1.8			
	300 mg/kg	N	6	6	6	6			
		Mean	0.61	1.09	14.8	26.9			
		S.D.	±0.08	±0.04	±1.7	±3.3			

Not significantly different from control.

Table 13 - continued      Organ weights in juvenile rats treated orally with 4-Chlorophenol for 18 days

Sex	Group and dose	Ovaries		
		(mg)	(mg/100gB. W.)	
Male	Control	N Mean S.D.		
	12 mg/kg	N Mean S.D.		
	60 mg/kg	N Mean S.D.		
	300 mg/kg	N Mean S.D.		
Female	Control	N Mean S.D.	6 17.3 $\pm 2.8$	6 30.9 $\pm 3.6$
	12 mg/kg	N Mean S.D.	6 17.0 $\pm 2.0$	6 29.8 $\pm 2.4$
	60 mg/kg	N Mean S.D.	6 15.5 $\pm 1.3$	6 28.1 $\pm 5.1$
	300 mg/kg	N Mean S.D.	6 15.0 $\pm 1.2$	6 27.5 $\pm 4.5$

Not significantly different from control.

Table 14 Organ weights in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Sex	Group and dose	Final body weight	Brain		Pituitary		Thyroids		Heart	
			(g)	(g)	(g/100gB. W.)	(mg)	(mg/100gB. W.)	(mg)	(mg/100gB. W.)	(mg)
Male	Control		5	5	5	5	5	5	5	5
	N	512.7	2.27	0.45	14.4	2.8	21.9	4.3	1682.9	328.4
	Mean	±36.2	±0.10	±0.03	±1.5	±0.3	±3.9	±0.7	±128.7	±14.8
	S.D.									
	12 mg/kg		6	6	6	6	6	6	6	6
	N	467.5	2.19	0.47	12.3*	2.6	25.2	5.4	1657.7	356.0
	Mean	±26.5	±0.08	±0.03	±0.9	±0.2	±3.3	±0.7	±204.9	±54.2
	S.D.									
	60 mg/kg		6	6	6	6	6	6	6	6
	N	474.8	2.20	0.47	12.9	2.7	25.6	5.4	1667.8	352.5
	Mean	±40.5	±0.05	±0.03	±0.9	±0.3	±3.1	±0.7	±136.3	±31.9
	S.D.									
	300 mg/kg		6	6	6	6	6	6	6	6
	N	471.8	2.21	0.47	12.4*	2.7	23.1	4.9	1699.1	361.0
	Mean	±42.7	±0.09	±0.04	±1.1	±0.3	±4.5	±0.9	±123.6	±18.0
	S.D.									
Female	Control		6	6	6	6	6	6	6	6
	N	283.9	2.06	0.73	14.8	5.2	19.6	6.9	1061.9	375.0
	Mean	±27.5	±0.10	±0.04	±4.2	±1.3	±3.2	±1.1	±72.1	±13.3
	S.D.									
	12 mg/kg		6	6	6	6	6	6	6	6
	N	272.5	2.06	0.76	15.1	5.6	16.6	6.1	1057.8	391.0
	Mean	±25.2	±0.08	±0.06	±0.7	±0.5	±1.5	±0.3	±106.4	±54.6
	S.D.									
	60 mg/kg		6	6	6	6	6	6	6	6
	N	260.0	2.05	0.79	15.1	5.8	17.6	6.8	1021.7	393.2
	Mean	±17.4	±0.03	±0.05	±2.7	±1.0	±2.0	±0.9	±110.6	±36.7
	S.D.									
	300 mg/kg		6	6	6	6	6	6	6	6
	N	271.5	2.02	0.75	16.3	6.0	17.5	6.4	1052.6	388.5
	Mean	±23.8	±0.03	±0.08	±1.2	±0.5	±4.8	±1.4	±85.5	±24.1
	S.D.									

\*: P&lt;0.05 (significantly different from control).

Table 14 - continued      Organ weights in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Sex	Group and dose	Lungs		Thymus		Liver		Spleen		
		(mg)	(mg/100gB. W.)	(mg)	(mg/100gB. W.)	(g)	(g/100gB. W.)	(mg)	(mg/100gB. W.)	
Male	Control	N Mean S.D.	5 1620.5 ±70.5	5 316.7 ±13.5	5 497.1 ±101.8	5 96.5 ±14.8	5 15.58 ±1.22	5 3.04 ±0.17	5 954.4 ±176.5	5 185.7 ±28.1
	12 mg/kg	N Mean S.D.	6 1560.1 ±86.0	6 333.9 ±12.2	6 548.7 ±83.0	6 117.7 ±19.1	6 14.07 ±1.12	6 3.01 ±0.09	6 892.8 ±64.8	6 191.9 ±22.1
	60 mg/kg	N Mean S.D.	6 1507.1 ±65.7	6 318.5 ±16.0	6 507.0 ±34.1	6 107.7 ±13.6	6 15.03 ±1.56	6 3.17 ±0.14	6 868.8 ±151.6	6 182.4 ±24.2
	300 mg/kg	N Mean S.D.	6 1555.1 ±129.1	6 330.3 ±20.1	6 487.4 ±97.0	6 103.1 ±18.8	6 14.21 ±1.54	6 3.02 ±0.27	6 841.9 ±128.2	6 177.9 ±16.2
Female	Control	N Mean S.D.	6 1204.8 ±103.9	6 425.1 ±19.7	6 454.7 ±73.0	6 161.9 ±34.4	6 8.14 ±1.38	6 2.86 ±0.23	6 664.7 ±115.1	6 234.0 ±31.4
	12 mg/kg	N Mean S.D.	6 1143.6 ±77.7	6 420.8 ±19.7	6 453.6 ±113.5	6 166.4 ±39.8	6 7.60 ±0.96	6 2.78 ±0.13	6 611.4 ±95.0	6 226.1 ±42.1
	60 mg/kg	N Mean S.D.	6 1133.6 ±72.1	6 436.5 ±19.5	6 374.8 ±49.3	6 144.3 ±17.2	6 7.77 ±0.74	6 2.99 ±0.19	6 557.1 ±75.4	6 215.7 ±38.0
	300 mg/kg	N Mean S.D.	6 1173.6 ±70.6	6 433.3 ±18.5	6 433.9 ±119.2	6 157.7 ±31.0	6 8.28 ±0.47	6 3.06 ±0.18	6 617.5 ±104.0	6 227.0 ±30.2

Not significantly different from control.

Table 14 - continued      Organ weights in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Sex	Group and dose	Kidneys		Adrenals		Epididymides		Testes	
		(g)	(g/100gB. W.)	(mg)	(mg/100gB. W.)	(mg)	(mg/100gB. W.)	(mg)	(mg/100gB. W.)
Male	Control	N	5	5	5	5	5	5	5
		Mean	3.45	0.67	94.4	18.3	1239.9	242.8	3709.1
		S.D.	±0.46	±0.06	±23.0	±3.6	±62.4	±21.6	±302.8
	12 mg/kg	N	6	6	6	6	6	6	6
		Mean	3.04	0.65	73.0	15.7	1155.7	247.7	3482.6
		S.D.	±0.26	±0.03	±6.3	±1.8	±125.1	±29.7	±288.4
	60 mg/kg	N	6	6	6	6	6	6	6
		Mean	3.09	0.65	74.7	15.9	1201.7	254.1	3752.8
		S.D.	±0.34	±0.04	±12.1	±3.2	±91.0	±22.9	±290.3
	300 mg/kg	N	6	6	6	6	6	6	6
		Mean	3.00	0.64	66.4*	14.0*	1099.6	236.7	3384.0
		S.D.	±0.32	±0.02	±14.8	±2.2	±242.2	±60.5	±128.3
Female	Control	N	6	6	6	6			
		Mean	1.99	0.70	77.7	27.4			
		S.D.	±0.37	±0.05	±11.8	±3.3			
	12 mg/kg	N	6	6	6	6			
		Mean	1.85	0.68	77.0	28.4			
		S.D.	±0.18	±0.02	±5.7	±2.5			
60 mg/kg	N	6	6	6	6				
		Mean	1.82	0.70	69.9	26.9			
		S.D.	±0.12	±0.03	±6.1	±2.1			
300 mg/kg	N	6	6	6	6				
		Mean	1.90	0.70	75.0	27.7			
		S.D.	±0.17	±0.06	±6.6	±2.4			

\*: P&lt;0.05 (significantly different from control).

Table 14 - continued

Organ weights in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Sex	Group and dose	Ovaries		
		(mg)	(mg/100gB. W.)	
Male	Control	N Mean S.D.		
	12 mg/kg	N Mean S.D.		
	60 mg/kg	N Mean S.D.		
	300 mg/kg	N Mean S.D.		
Female	Control	N Mean S.D.	6 84.5 ±15.9	6 29.8 ±5.4
	12 mg/kg	N Mean S.D.	6 85.0 ±9.2	6 31.5 ±5.2
	60 mg/kg	N Mean S.D.	6 82.5 ±11.9	6 31.8 ±4.4
	300 mg/kg	N Mean S.D.	6 82.8 ±9.8	6 30.6 ±3.2

Not significantly different from control.

Table 15 Histopathological findings in juvenile rats treated orally with 4-Chlorophenol for 18 days

Organs and findings	Sex	Male																			
		Control				12 mg/kg				60 mg/kg				300 mg/kg							
		Number of animals					6					6					6				
		-	+	++	+++	Total	-	+	++	+++	Total	-	+	++	+++	Total	-	+	++	+++	Total
Respiratory system	Lung	6	0	(6)	0	0					(0)				(0)		6	0	(6)	0	0
	Accumulation, foam cell, focal																				

Not significantly different from control.

Grade sign: -, none; +, mild; ++, moderate; +++, marked.

Figures in parentheses are number of animals with tissues examined histopathologically.

There are no remarkable changes in the liver, thymus, spleen, heart, kidney, testis, epididymis, pituitary, thyroid, adrenal and brain in control and 300 mg/kg groups.

Table 15 - continued

## Histopathological findings in juvenile rats treated orally with 4-Chlorophenol for 18 days

Organs and findings	Sex	Female																			
		Group and dose		Control					12 mg/kg					60 mg/kg							
				Number of animals					6					6							
		-	+	++	+++	Total	-	+	++	+++	Total	-	+	++	+++	Total	-	+	++	+++	Total
Respiratory system	Lung																				
	Accumulation, foam cell, focal	5	1	(6)	0	0	1				(0)				(0)		6	0	(6)	0	0

Not significantly different from control.

Grade sign: -, none; +, mild; ++, moderate; +++, marked.

Figures in parentheses are number of animals with tissues examined histopathologically.

There are no remarkable changes in the liver, thymus, spleen, heart, kidney, ovary, pituitary, thyroid, adrenal and brain in control and 300 mg/kg groups.

Table 16 Histopathological findings in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Organs and findings	Sex	Group and dose	Male																			
			Control					12 mg/kg					60 mg/kg					300 mg/kg				
			Number of animals					5					6					6				
			-	+	++	+++	Total	-	+	++	+++	Total	-	+	++	+++	Total	-	+	++	+++	Total
Digestive system																						
Liver																						
Necrosis, hepatocyte, focal			5	0	(5)	0	0						(0)					5	1	(6)	0	1
Cardiovascular system																						
Heart													(0)					(0)				
Degeneration/fibrosis, myocardium, focal			5	0	(5)	0	0						(0)					5	1	(6)	0	1
Urinary system																						
Kidney													(0)					(0)				
Dilatation, pelvic cavity			4	1	(5)	0	0	1					(0)					6	0	(6)	0	0
Cellular infiltration, mixed			5	0	0	0	0	0										6	0	0	0	0
Mineralization, corticomedullary			5	0	0	0	0	0										6	0	0	0	0
Genital system																						
Testis													(0)					(0)				
Atrophy, seminiferous tubule			5	0	(5)	0	0	0					(0)					5	0	(6)	0	1
Epididymis													(0)					(0)				
Decrease, sperm, lumen			5	0	(5)	0	0	0					(0)					5	0	(6)	0	1
																		5	0	(6)	0	1

Not significantly different from control.

Grade sign: -, none; +, mild; ++, moderate; +++, marked.

Figures in parentheses are number of animals with tissues examined histopathologically.

There are no remarkable changes in the lung, thymus, spleen, pituitary, thyroid, adrenal and brain in control and 300 mg/kg groups.

Table 16 - continued

Histopathological findings in juvenile rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Organs and findings	Sex	Female																									
		Group and dose		Control						12 mg/kg						60 mg/kg						300 mg/kg					
				Number of animals					-	+	++	+++	Total	-	+	++	+++	Total	-	+	++	+++	Total	-	+	++	+++
		-	+	++	+++	Total	-	+	++	+++	Total	-	+	++	+++	Total	-	+	++	+++	Total	-	+	++	+++	Total	
Digestive system																											
Liver																											
Necrosis, hepatocyte, focal		6	0	(6)	0	0	0					(0)				(0)					6	0	(6)	0	0	0	
Cardiovascular system																											
Heart																											
Degeneration/fibrosis, myocardium, focal		6	0	(6)	0	0	0					(0)				(0)					6	0	(6)	0	0	0	
Urinary system																											
Kidney																											
Dilatation, pelvic cavity		6	0	(6)	0	0	0					(0)				(0)					6	0	(6)	0	0	0	
Cellular infiltration, mixed		5	1	0	0	0	1													6	0	0	0	0	0		
Mineralization, corticomedullary		5	1	0	0	0	1													6	0	0	0	0	0		
Genital system																											
Testis												NA				NA						NA					
Atrophy, seminiferous tubule																											
Epididymis												NA				NA						NA					
Decrease, sperm, lumen																											

Not significantly different from control.

Grade sign: -, none; +, mild; ++, moderate; +++, marked.

NA, not applicable.

Figures in parentheses are number of animals with tissues examined histopathologically.

There are no remarkable changes in the lung, thymus, spleen, ovary, pituitary, thyroid, adrenal and brain in control and 300 mg/kg groups.

Table 17 Histopathological findings in a juvenile rat found dead during oral treatment with 4-Chlorophenol for 18 days

Organs and findings	Sex	Male				
	Group and dose	Control				
	Number of animals	1				
		-	+	++	+++	Total
Respiratory system	Lung	0	1	0	0	1
	Hemorrhage			(1)		

Not significantly different from control.

Grade sign: -, none; +, mild; ++, moderate; +++, marked.

Figures in parentheses are number of animals with tissues examined histopathologically.

There are no remarkable changes in the liver, thymus, spleen, heart, kidney, testis, epididymis, pituitary, thyroid, adrenal and brain.

4-クロロフェノールのラット新生児における哺育期投与試験

添付資料

1. 被験物質原体の分析成績書
2. 被験液の安定性試験報告書
3. 被験液の濃度確認成績書

(別紙2)

化学物質の名称	4-クロロフェノール		
別 名	パラクロロフェノール		
構造式又は 示性式			
化学物質の純度 (サンプル)	99.29 wt%	化学物質のLot. No (サンプル)	PJF-3
不純物の名称 及び純度	2,6-ジクロロフェノール 0.37% 2,4-ジクロロフェノール 0.34%		
CAS番号	106489	蒸気圧(摂氏25度)	133 Pa以下
分子量	128.56	分配係数	
融 点	43.2~43.7 °C	常温における 性状	白色~淡褐色結晶
沸 点	220 °C		
安定性 (水、熱、光等)	光、空气中で着色する。 密閉容器内では、常温、常圧で安定である。		
溶媒に対する 溶解度	溶 媒	溶 解 度	溶 媒
	水	2.71%	DMSO
	アセトン	易 溶	その他( )
その他	<b>有害性情報(急性毒性等)</b> 経口 ラット LD <sub>50</sub> 261mg/Kg 皮膚及び眼に強い刺激性がある(腐食性) <b>その他の物理化学的性質(pH、pKa等)</b> pKa = 9.378 <b>溶媒中の安定性</b> アルコール類中では安定。 <b>取扱い上の留意点(危険性、有害性等)</b> 引火点 = 122°C(クリープランド開放式) 皮膚からの吸收、皮膚、眼との接触、蒸気の吸入を避けるため、保護具を着用する。着衣は不浸透性のものが望ましい。 周囲で火気を使用しない。強酸化性物質との接触を避ける。 <b>廃棄方法 等</b> スクラバーを具備した焼却炉で木粉等に混ぜて焼却する。 水溶液は、オゾン等により酸化分解する。		

平成 // 年 9 月 2 日

## 試験成績表

株式会社パナファーム・ラボラトリーズ御中

高松工場 製造部 検査課

物質名	4-クロロフェノール
別名	パラクロロフェノール
製品名	パラクロロフェノール
製造番号	PJF-3
製造年月	平成10年6月3日

試験項目	単位	毒性試験前 (平成10年12月16日分析)	毒性試験後 (平成//年8月27日分析)
純度	wt%	99.29	99.31

品質上問題なし。

以上

4-クロロフェノールのコーンオイル溶液中の安定性試験

-最終報告書-

1999年 6月 7日

試験施設 : 株式会社パナファーム・ラボラトリーズ 安全性研究所  
熊本県宇土市栗崎町1285番地 (〒869-0425)

## 試験目的

4-クロロフェノールの安全性に関する毒性試験の一環として実施予定の、急性毒性試験、28日間反復投与毒性試験及び特殊生殖毒性試験における投与液の安定性を保証するために、4-クロロフェノールの0.2及び40 w/v%コーンオイル溶液の室温散光下8日間の安定性を確認した。

## 試験材料及び方法

### 1. 被験物質及び媒体

■より供給された4-クロロフェノール(Lot No PJF-3)を使用した。本被験物質の性状は、白色～淡褐色結晶性の粉末である。媒体にはコーンオイル(Lot No V8M6177, ナカライトスク株式会社)を使用した。4-クロロフェノールは、被験物質室の保管庫に気密容器に入れ室温、遮光下で保存した。

### 2. 混合物の調製法

#### ① 0.2 w/v%混合物

4-クロロフェノールの0.16 gを正確に秤り取り、コーンオイルを加えて、正確に80 mLとした。

#### ② 40% w/v%混合物

4-クロロフェノールの32 gを正確に秤り取り、コーンオイルを加えて、正確に80 mLとした。

### 3. 調製混合物の保存法と期間

室温保存用の調製混合物は、分析室(61)の安定性試験区画に室温散光下(褐色バイアル、23～27°C)で各分析日まで保存した。また、冷蔵保存用の調製混合物は、分析室(61)に設置した冷蔵庫内の安定性試験区画に低温遮光下(褐色バイアルにアルミホイルを巻いて遮光、1～6°C)で各分析日まで保存した。

### 4. 試薬

メタノール : HPLC用(和光純薬工業株式会社)

リン酸二水素カリウム(無水)

: 試薬特級(和光純薬工業株式会社)

アセトン : HPLC用(和光純薬工業株式会社)

精製水(移動相用) : 株式会社パナファーム・ラボラトリーズにて精製

装置；逆浸透純水装置(型式Milli-Ro® 60, Millipore)及び  
超純水製造装置(型式Milli-Q SP. TOC., Millipore)

## 6. 判定基準

調製時の濃度が表示濃度の100±5%以内であり、調製時の濃度に対する各分析日の平均濃度が100±5%以内の時を安定とした。

## 結果及び結論

試験実施日	保存条件	表示濃度 (mg/mL)	試 料	濃度 (mg/mL)	含有率 (%)	平均濃度 (mg/mL)	対0日比 (%)
1999. 4. 19 (調製直後)	—	2	①	2.06	103.0	2.04	100.0
			②	2.02	101.0		
	室温散光	400	①	408.65	102.2	413.23	100.0
			②	417.80	104.5		
1999. 4. 19 (保存後6時間)	室温散光	2	①	1.99	99.5	1.99	97.5
			②	1.98	99.0		
	室温散光	400	①	403.39	100.8	403.60	97.7
			②	403.80	101.0		
1999. 4. 24 (保存後5日目)	室温散光	2	①	1.97	98.5	1.97	96.6
			②	1.96	98.0		
	室温散光	400	①	405.05	101.3	403.01	97.5
			②	400.97	100.2		
1999. 4. 27 (保存後8日目)	室温散光	2	①	2.00	100.0	2.01	98.5
			②	2.01	100.5		
	室温散光	400	①	413.30	103.3	414.46	100.3
			②	415.61	103.9		

以上の結果より4-クロロフェノールの0.2及び40%コーンオイル溶液は、室温散光下で8日間安定であった。なお、室温散光下での安定性が判明したことから、低温遮光下での検討は、実施しなかった。

試験番号49815

## 分析成績書

1. 試験番号 : 49815
2. 分析番号 : AN99109
3. 分析項目 : 濃度確認
4. 被験物質名 : 4-クロロフェノール
5. 調製日 : 1999年 7月 21日
6. 濃度確認日 : 1999年 7月 23日
7. 試験結果 :

表示濃度 (%)	試料	濃度 (mg/mL)	含有率 (%)	平均濃度 (mg/mL)	平均含有率 (%)
0.24	1	2.431	101.3	2.436	101.5
	2	2.440	101.7		
1.2	1	12.08	100.7	12.13	101.1
	2	12.18	101.5		
6	1	60.01	100.0	59.95	99.9
	2	59.89	99.8		

8. 判定 : 投与液として適合

分析責任者

2000 年 1 月 18 日

株式会社パナファーム・ラボラトリーズ

試験責任者

2000 年 1 月 18 日

株式会社パナファーム・ラボラトリーズ

4-クロロフェノールのラット新生児における哺育期投与試験

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**(個別データ)**

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Appendix 1 Individual clinical signs in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days										
		1	2	3	4	5	6	7	8	9	10	11
Control	701	-	-	-	-	-	-	-	-	-	-	-
	702	-	-	-	-	-	-	-	-	-	-	-
	703	-	-	-	-	-	-	-	-	-	-	-
	704	-	-	-	-	-	-	-	-	-	-	-
	705	-	-	-	-	-	-	-	-	-	-	-
	706	-	-	-	-	-	-	-	-	-	-	-
	707	-	-	-	-	-	-	-	-	-	-	-
	708	-	-	-	-	-	-	-	-	-	-	-
	709	-	-	-	-	-	-	-	-	-	-	-
	710	-	-	-	-	-	-	-	-	-	-	-
	711	-	-	-	-	-	-	-	-	b, c, d	-	-
	712	-	-	-	-	-	-	-	-	-	-	-
12 mg/kg	713	-	-	-	-	-	-	-	-	-	-	-
	714	-	-	-	-	-	-	-	-	-	-	-
	715	-	-	-	-	-	-	-	-	-	-	-
	716	-	-	-	-	-	-	-	-	-	-	-
	717	-	-	-	-	-	-	-	-	-	-	-
	718	-	-	-	-	-	-	-	-	-	-	-
	719	-	-	-	-	-	-	-	-	-	-	-
	720	-	-	-	-	-	-	-	-	-	-	-
	721	-	-	-	-	-	-	-	-	-	-	-
	722	-	-	-	-	-	-	-	-	-	-	-
	723	-	-	-	-	-	-	-	-	-	-	-
	724	-	-	-	-	-	-	-	-	-	-	-
60 mg/kg	725	-	-	-	-	-	-	-	-	-	-	-
	726	-	-	-	-	-	-	-	-	-	-	-
	727	-	-	-	-	-	-	-	-	-	-	-
	728	-	-	-	-	-	-	-	-	-	-	-
	729	-	-	-	-	-	-	-	-	-	-	-
	730	-	-	-	-	-	-	-	-	-	-	-
	731	-	-	-	-	-	-	-	-	-	-	-
	732	-	-	-	-	-	-	-	-	-	-	-
	733	-	-	-	-	-	-	-	-	-	-	-
	734	-	-	-	-	-	-	-	-	-	-	-
	735	-	-	-	-	-	-	-	-	-	-	-
	736	-	-	-	-	-	-	-	-	-	-	-

Clinical sign: -, No abnormality; a, Tremor; b, Hypoactivity; c, Dyspnea; d, Dead.

## Individual clinical signs in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days										
		1	2	3	4	5	6	7	8	9	10	11
300 mg/kg	737	a	a	a	-	a	a	a	a	a	a	a
	738	-	-	-	a	a	a	a	a	a	a	a
	739	-	-	a	a	a	a	-	-	-	a	-
	740	a	a	a	-	a	a	a	a	a	-	-
	741	-	a	a	a	a	a	a	a	a	-	a
	742	a, b	a	-	a	a	-	a	a	a	-	a
	743	a	a	a	a	a	a	a	a	a	a	a
	744	a, b	a	a	a	a	a	a	a	a	a	a
	745	a	-	a	-	a	a	a	a	a	a	a
	746	a, b	a	a	a	a	a	a	a	a	a	a
	747	a	a	a	a	a	a	a	a	a	a	a
	748	a, b	a	a	a	a	a	a	a	a	a	a

Clinical sign: -, No abnormality; a, Tremor; b, Hypoactivity.

## Appendix 1 - continued

Study No. 49815

Individual clinical signs in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days										
		12	13	14	15	16	17	18	19	20	21	22
Control	701	-	-	-	-	-	-	-	-	-	-	-
	702	-	-	-	-	-	-	-	-	-	-	-
	703	-	-	-	-	-	-	-	-	-	-	-
	704	-	-	-	-	-	-	-	-	-	-	-
	705	-	-	-	-	-	-	-	-	-	-	-
	706	-	-	-	-	-	-	-	-	-	-	-
	707	-	-	-	-	-	-	-	-	-	-	-
	708	-	-	-	-	-	-	-	-	-	-	-
	709	-	-	-	-	-	-	-	-	-	-	-
	710	-	-	-	-	-	-	-	-	-	-	-
	711	-	-	-	-	-	-	-	-	-	-	-
	712	-	-	-	-	-	-	-	-	-	-	-
12 mg/kg	713	-	-	-	-	-	-	-	-	-	-	-
	714	-	-	-	-	-	-	-	-	-	-	-
	715	-	-	-	-	-	-	-	-	-	-	-
	716	-	-	-	-	-	-	-	-	-	-	-
	717	-	-	-	-	-	-	-	-	-	-	-
	718	-	-	-	-	-	-	-	-	-	-	-
	719	-	-	-	-	-	-	-	-	-	-	-
	720	-	-	-	-	-	-	-	-	-	-	-
	721	-	-	-	-	-	-	-	-	-	-	-
	722	-	-	-	-	-	-	-	-	-	-	-
	723	-	-	-	-	-	-	-	-	-	-	-
	724	-	-	-	-	-	-	-	-	-	-	-
60 mg/kg	725	-	-	-	-	-	-	-	-	-	-	-
	726	-	-	-	-	-	-	-	-	-	-	-
	727	-	-	-	-	-	-	-	-	-	-	-
	728	-	-	-	-	-	-	-	-	-	-	-
	729	-	-	-	-	-	-	-	-	-	-	-
	730	-	-	-	-	-	-	-	-	-	-	-
	731	-	-	-	-	-	-	-	-	-	-	-
	732	-	-	-	-	-	-	-	-	-	-	-
	733	-	-	-	-	-	-	-	-	-	-	-
	734	-	-	-	-	-	-	-	-	-	-	-
	735	-	-	-	-	-	-	-	-	-	-	-
	736	-	-	-	-	-	-	-	-	-	-	-

Clinical sign: -, No abnormality.

Appendix 1 - continued

Study No. 49815

Individual clinical signs in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days										
		12	13	14	15	16	17	18	19	20	21	22
300 mg/kg	737	a	-	-	-	a	-	-				
	738	-	-	-	-	-	-	-				
	739	a	-	-	-	-	-	-				
	740	-	-	-	-	-	-	-				
	741	-	-	-	-	a	-	-				
	742	a	-	-	-	a	-	-				
	743	a	-	-	-	-	-	-	-	-	-	-
	744	-	-	-	-	-	-	-	-	-	-	-
	745	-	-	-	-	-	-	a	-	-	-	-
	746	a	a	a	-	-	a	-	-	-	-	-
	747	a	-	-	a	-	-	-	-	-	-	-
	748	-	-	-	-	-	-	-	-	-	-	-

Clinical sign: -, No abnormality; a, Tremor.

## Appendix 1 - continued

Study No. 49815

Individual clinical signs in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days										
		23	24	25	26	27	28	29	30	31	32	33
Control	701	-	-	-	-	-	-	-	-	-	-	-
	702	-	-	-	-	-	-	-	-	-	-	-
	703	-	-	-	-	-	-	-	-	-	-	-
	704	-	-	-	-	-	-	-	-	-	-	-
	705	-	-	-	-	-	-	-	-	-	-	-
	706	-	-	-	-	-	-	-	-	-	-	-
	707	-	-	-	-	-	-	-	-	-	-	-
	708	-	-	-	-	-	-	-	-	-	-	-
	709	-	-	-	-	-	-	-	-	-	-	-
	710	-	-	-	-	-	-	-	-	-	-	-
	711	-	-	-	-	-	-	-	-	-	-	-
	712	-	-	-	-	-	-	-	-	-	-	-
12 mg/kg	713	-	-	-	-	-	-	-	-	-	-	-
	714	-	-	-	-	-	-	-	-	-	-	-
	715	-	-	-	-	-	-	-	-	-	-	-
	716	-	-	-	-	-	-	-	-	-	-	-
	717	-	-	-	-	-	-	-	-	-	-	-
	718	-	-	-	-	-	-	-	-	-	-	-
	719	-	-	-	-	-	-	-	-	-	-	-
	720	-	-	-	-	-	-	-	-	-	-	-
	721	-	-	-	-	-	-	-	-	-	-	-
	722	-	-	-	-	-	-	-	-	-	-	-
	723	-	-	-	-	-	-	-	-	-	-	-
	724	-	-	-	-	-	-	-	-	-	-	-
60 mg/kg	725	-	-	-	-	-	-	-	-	-	-	-
	726	-	-	-	-	-	-	-	-	-	-	-
	727	-	-	-	-	-	-	-	-	-	-	-
	728	-	-	-	-	-	-	-	-	-	-	-
	729	-	-	-	-	-	-	-	-	-	-	-
	730	-	-	-	-	-	-	-	-	-	-	-
	731	-	-	-	-	-	-	-	-	-	-	-
	732	-	-	-	-	-	-	-	-	-	-	-
	733	-	-	-	-	-	-	-	-	-	-	-
	734	-	-	-	-	-	-	-	-	-	-	-
	735	-	-	-	-	-	-	-	-	-	-	-
	736	-	-	-	-	-	-	-	-	-	-	-

Clinical sign: -, No abnormality.

Appendix 1 - continued

Study No. 49815

Individual clinical signs in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days										
		23	24	25	26	27	28	29	30	31	32	33
300 mg/kg	737	-	-	-	-	-	-	-	-	-	-	-
	738	-	-	-	-	-	-	-	-	-	-	-
	739	-	-	-	-	-	-	-	-	-	-	-
	740	-	-	-	-	-	-	-	-	-	-	-
	741	-	-	-	-	-	-	-	-	-	-	-
	742	-	-	-	-	-	-	-	-	-	-	-
	743	-	-	-	-	-	-	-	-	-	-	-
	744	-	-	-	-	-	-	-	-	-	-	-
	745	-	-	-	-	-	-	-	-	-	-	-
	746	-	-	-	-	-	-	-	-	-	-	-
	747	-	-	-	-	-	-	-	-	-	-	-
	748	-	-	-	-	-	-	-	-	-	-	-

Clinical sign: -, No abnormality.

Appendix 1 - continued

Study No. 49815

Individual clinical signs in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days										
		34	35	36	37	38	39	40	41	42	43	44
Control	701	-	-	-	-	-	-	-	-	-	-	-
	702	-	-	-	-	-	-	-	-	-	-	-
	703	-	-	-	-	-	-	-	-	-	-	-
	704	-	-	-	-	-	-	-	-	-	-	-
	705	-	-	-	-	-	-	-	-	-	-	-
	706	-	-	-	-	-	-	-	-	-	-	-
	707	-	-	-	-	-	-	-	-	-	-	-
	708	-	-	-	-	-	-	-	-	-	-	-
	709	-	-	-	-	-	-	-	-	-	-	-
	710	-	-	-	-	-	-	-	-	-	-	-
	711	-	-	-	-	-	-	-	-	-	-	-
	712	-	-	-	-	-	-	-	-	-	-	-
12 mg/kg	713	-	-	-	-	-	-	-	-	-	-	-
	714	-	-	-	-	-	-	-	-	-	-	-
	715	-	-	-	-	-	-	-	-	-	-	-
	716	-	-	-	-	-	-	-	-	-	-	-
	717	-	-	-	-	-	-	-	-	-	-	-
	718	-	-	-	-	-	-	-	-	-	-	-
	719	-	-	-	-	-	-	-	-	-	-	-
	720	-	-	-	-	-	-	-	-	-	-	-
	721	-	-	-	-	-	-	-	-	-	-	-
	722	-	-	-	-	-	-	-	-	-	-	-
	723	-	-	-	-	-	-	-	-	-	-	-
	724	-	-	-	-	-	-	-	-	-	-	-
60 mg/kg	725	-	-	-	-	-	-	-	-	-	-	-
	726	-	-	-	-	-	-	-	-	-	-	-
	727	-	-	-	-	-	-	-	-	-	-	-
	728	-	-	-	-	-	-	-	-	-	-	-
	729	-	-	-	-	-	-	-	-	-	-	-
	730	-	-	-	-	-	-	-	-	-	-	-
	731	-	-	-	-	-	-	-	-	-	-	-
	732	-	-	-	-	-	-	-	-	-	-	-
	733	-	-	-	-	-	-	-	-	-	-	-
	734	-	-	-	-	-	-	-	-	-	-	-
	735	-	-	-	-	-	-	-	-	-	-	-
	736	-	-	-	-	-	-	-	-	-	-	-

Clinical sign: -, No abnormality.

Appendix 1 - continued

Study No. 49815

Individual clinical signs in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days										
		34	35	36	37	38	39	40	41	42	43	44
300 mg/kg	737	-	-	-	-	-	-	-	-	-	-	-
	738	-	-	-	-	-	-	-	-	-	-	-
	739	-	-	-	-	-	-	-	-	-	-	-
	740	-	-	-	-	-	-	-	-	-	-	-
	741	-	-	-	-	-	-	-	-	-	-	-
	742	-	-	-	-	-	-	-	-	-	-	-
	743	-	-	-	-	-	-	-	-	-	-	-
	744	-	-	-	-	-	-	-	-	-	-	-
	745	-	-	-	-	-	-	-	-	-	-	-
	746	-	-	-	-	-	-	-	-	-	-	-
	747	-	-	-	-	-	-	-	-	-	-	-
	748	-	-	-	-	-	-	-	-	-	-	-

Clinical sign: - , No abnormality.

## Appendix 1 - continued

Study No. 49815

Individual clinical signs in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days									
		45	46	47	48	49	50	51	52	53	54
Control	701	-	-	-	-	-	-	-	-	-	-
	702	-	-	-	-	-	-	-	-	-	-
	703	-	-	-	-	-	-	-	-	-	-
	704	-	-	-	-	-	-	-	-	-	-
	705	-	-	-	-	-	-	-	-	-	-
	706	-	-	-	-	-	-	-	-	-	-
	707	-	-	-	-	-	-	-	-	-	-
	708	-	-	-	-	-	-	-	-	-	-
	709	-	-	-	-	-	-	-	-	-	-
	710	-	-	-	-	-	-	-	-	-	-
	711	-	-	-	-	-	-	-	-	-	-
	712	-	-	-	-	-	-	-	-	-	-
12 mg/kg	713	-	-	-	-	-	-	-	-	-	-
	714	-	-	-	-	-	-	-	-	-	-
	715	-	-	-	-	-	-	-	-	-	-
	716	-	-	-	-	-	-	-	-	-	-
	717	-	-	-	-	-	-	-	-	-	-
	718	-	-	-	-	-	-	-	-	-	-
	719	-	-	-	-	-	-	-	-	-	-
	720	-	-	-	-	-	-	-	-	-	-
	721	-	-	-	-	-	-	-	-	-	-
	722	-	-	-	-	-	-	-	-	-	-
	723	-	-	-	-	-	-	-	-	-	-
	724	-	-	-	-	-	-	-	-	-	-
60 mg/kg	725	-	-	-	-	-	-	-	-	-	-
	726	-	-	-	-	-	-	-	-	-	-
	727	-	-	-	-	-	-	-	-	-	-
	728	-	-	-	-	-	-	-	-	-	-
	729	-	-	-	-	-	-	-	-	-	-
	730	-	-	-	-	-	-	-	-	-	-
	731	-	-	-	-	-	-	-	-	-	-
	732	-	-	-	-	-	-	-	-	-	-
	733	-	-	-	-	-	-	-	-	-	-
	734	-	-	-	-	-	-	-	-	-	-
	735	-	-	-	-	-	-	-	-	-	-
	736	-	-	-	-	-	-	-	-	-	-

Clinical sign: -, No abnormality.

## Appendix 1 - continued

Study No. 49815

Individual clinical signs in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days									
		45	46	47	48	49	50	51	52	53	54
300 mg/kg	737	-	-	-	-	-	-	-	-	-	-
	738	-	-	-	-	-	-	-	-	-	-
	739	-	-	-	-	-	-	-	-	-	-
	740	-	-	-	-	-	-	-	-	-	-
	741	-	-	-	-	-	-	-	-	-	-
	742	-	-	-	-	-	-	-	-	-	-
	743	-	-	-	-	-	-	-	-	-	-
	744	-	-	-	-	-	-	-	-	-	-
	745	-	-	-	-	-	-	-	-	-	-
	746	-	-	-	-	-	-	-	-	-	-
	747	-	-	-	-	-	-	-	-	-	-
	748	-	-	-	-	-	-	-	-	-	-

Clinical sign: -, No abnormality.

## Appendix 1 - continued

Study No. 49815

Individual clinical signs in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days										
		56	57	58	59	60	61	62	63	64	65	66
Control	701	-	-	-	-	-	-	-	-	-	-	-
	702	-	-	-	-	-	-	-	-	-	-	-
	703	-	-	-	-	-	-	-	-	-	-	-
	704	-	-	-	-	-	-	-	-	-	-	-
	705	-	-	-	-	-	-	-	-	-	-	-
	706	-	-	-	-	-	-	-	-	-	-	-
	707	-	-	-	-	-	-	-	-	-	-	-
	708	-	-	-	-	-	-	-	-	-	-	-
	709	-	-	-	-	-	-	-	-	-	-	-
	710	-	-	-	-	-	-	-	-	-	-	-
	711	-	-	-	-	-	-	-	-	-	-	-
	712	-	-	-	-	-	-	-	-	-	-	-
12 mg/kg	713	-	-	-	-	-	-	-	-	-	-	-
	714	-	-	-	-	-	-	-	-	-	-	-
	715	-	-	-	-	-	-	-	-	-	-	-
	716	-	-	-	-	-	-	-	-	-	-	-
	717	-	-	-	-	-	-	-	-	-	-	-
	718	-	-	-	-	-	-	-	-	-	-	-
	719	-	-	-	-	-	-	-	-	-	-	-
	720	-	-	-	-	-	-	-	-	-	-	-
	721	-	-	-	-	-	-	-	-	-	-	-
	722	-	-	-	-	-	-	-	-	-	-	-
	723	-	-	-	-	-	-	-	-	-	-	-
	724	-	-	-	-	-	-	-	-	-	-	-
60 mg/kg	725	-	-	-	-	-	-	-	-	-	-	-
	726	-	-	-	-	-	-	-	-	-	-	-
	727	-	-	-	-	-	-	-	-	-	-	-
	728	-	-	-	-	-	-	-	-	-	-	-
	729	-	-	-	-	-	-	-	-	-	-	-
	730	-	-	-	-	-	-	-	-	-	-	-
	731	-	-	-	-	-	-	-	-	-	-	-
	732	-	-	-	-	-	-	-	-	-	-	-
	733	-	-	-	-	-	-	-	-	-	-	-
	734	-	-	-	-	-	-	-	-	-	-	-
	735	-	-	-	-	-	-	-	-	-	-	-
	736	-	-	-	-	-	-	-	-	-	-	-

Clinical sign: -, No abnormality.

Appendix I - continued

Study No. 49815

Individual clinical signs in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days										
		56	57	58	59	60	61	62	63	64	65	66
300 mg/kg	737	-	-	-	-	-	-	-	-	-	-	-
	738	-	-	-	-	-	-	-	-	-	-	-
	739	-	-	-	-	-	-	-	-	-	-	-
	740	-	-	-	-	-	-	-	-	-	-	-
	741	-	-	-	-	-	-	-	-	-	-	-
	742	-	-	-	-	-	-	-	-	-	-	-
	743	-	-	-	-	-	-	-	-	-	-	-
	744	-	-	-	-	-	-	-	-	-	-	-
	745	-	-	-	-	-	-	-	-	-	-	-
	746	-	-	-	-	-	-	-	-	-	-	-
	747	-	-	-	-	-	-	-	-	-	-	-
	748	-	-	-	-	-	-	-	-	-	-	-

Clinical sign: -, No abnormality.

## Appendix 1 - continued

Study No. 49815

Individual clinical signs in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days										
		67	68	69	70	71	72	73	74	75	76	77
Control	701	-	-	-	-	-	-	-	-	-	-	-
	702	-	-	-	-	-	-	-	-	-	-	-
	703	-	-	-	-	-	-	-	-	-	-	-
	704	-	-	-	-	-	-	-	-	-	-	-
	705	-	-	-	-	-	-	-	-	-	-	-
	706	-	-	-	-	-	-	-	-	-	-	-
	707	-	-	-	-	-	-	-	-	-	-	-
	708	-	-	-	-	-	-	-	-	-	-	-
	709	-	-	-	-	-	-	-	-	-	-	-
	710	-	-	-	-	-	-	-	-	-	-	-
	711	-	-	-	-	-	-	-	-	-	-	-
	712	-	-	-	-	-	-	-	-	-	-	-
12 mg/kg	713	-	-	-	-	-	-	-	-	-	-	-
	714	-	-	-	-	-	-	-	-	-	-	-
	715	-	-	-	-	-	-	-	-	-	-	-
	716	-	-	-	-	-	-	-	-	-	-	-
	717	-	-	-	-	-	-	-	-	-	-	-
	718	-	-	-	-	-	-	-	-	-	-	-
	719	-	-	-	-	-	-	-	-	-	-	-
	720	-	-	-	-	-	-	-	-	-	-	-
	721	-	-	-	-	-	-	-	-	-	-	-
	722	-	-	-	-	-	-	-	-	-	-	-
	723	-	-	-	-	-	-	-	-	-	-	-
	724	-	-	-	-	-	-	-	-	-	-	-
60 mg/kg	725	-	-	-	-	-	-	-	-	-	-	-
	726	-	-	-	-	-	-	-	-	-	-	-
	727	-	-	-	-	-	-	-	-	-	-	-
	728	-	-	-	-	-	-	-	-	-	-	-
	729	-	-	-	-	-	-	-	-	-	-	-
	730	-	-	-	-	-	-	-	-	-	-	-
	731	-	-	-	-	-	-	-	-	-	-	-
	732	-	-	-	-	-	-	-	-	-	-	-
	733	-	-	-	-	-	-	-	-	-	-	-
	734	-	-	-	-	-	-	-	-	-	-	-
	735	-	-	-	-	-	-	-	-	-	-	-
	736	-	-	-	-	-	-	-	-	-	-	-

Clinical sign: -, No abnormality.

Appendix 1 - continued

Study No. 49815

Individual clinical signs in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days										
		67	68	69	70	71	72	73	74	75	76	77
300 mg/kg	737	-	-	-	-	-	-	-	-	-	-	-
	738	-	-	-	-	-	-	-	-	-	-	-
	739	-	-	-	-	-	-	-	-	-	-	-
	740	-	-	-	-	-	-	-	-	-	-	-
	741	-	-	-	-	-	-	-	-	-	-	-
	742	-	-	-	-	-	-	-	-	-	-	-
	743	-	-	-	-	-	-	-	-	-	-	-
	744	-	-	-	-	-	-	-	-	-	-	-
	745	-	-	-	-	-	-	-	-	-	-	-
	746	-	-	-	-	-	-	-	-	-	-	-
	747	-	-	-	-	-	-	-	-	-	-	-
	748	-	-	-	-	-	-	-	-	-	-	-

Clinical sign: -, No abnormality.

Appendix 1 - continued

Study No. 49815

Individual clinical signs in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days			
		78	79	80	81
Control	701	-	-	-	-
	702	-	-	-	-
	703	-	-	-	-
	704	-	-	-	-
	705	-	-	-	-
	706	-	-	-	-
	707	-	-	-	-
	708	-	-	-	-
	709	-	-	-	-
	710	-	-	-	-
	711	-	-	-	-
	712	-	-	-	-
12 mg/kg	713	-	-	-	-
	714	-	-	-	-
	715	-	-	-	-
	716	-	-	-	-
	717	-	-	-	-
	718	-	-	-	-
	719	-	-	-	-
	720	-	-	-	-
	721	-	-	-	-
	722	-	-	-	-
	723	-	-	-	-
	724	-	-	-	-
60 mg/kg	725	-	-	-	-
	726	-	-	-	-
	727	-	-	-	-
	728	-	-	-	-
	729	-	-	-	-
	730	-	-	-	-
	731	-	-	-	-
	732	-	-	-	-
	733	-	-	-	-
	734	-	-	-	-
	735	-	-	-	-
	736	-	-	-	-

Clinical sign: -, No abnormality.

Appendix 1 - continued

Study No. 49815  
Individual clinical signs in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days			
		78	79	80	81
300 mg/kg	737	-	-	-	-
	738	-	-	-	-
	739	-	-	-	-
	740	-	-	-	-
	741	-	-	-	-
	742	-	-	-	-
	743	-	-	-	-
	744	-	-	-	-
	745	-	-	-	-
	746	-	-	-	-
	747	-	-	-	-
	748	-	-	-	-

Clinical sign: -, No abnormality.

## Appendix 2 Individual clinical signs in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days										
		1	2	3	4	5	6	7	8	9	10	11
Control	751	-	-	-	-	-	-	-	-	-	-	-
	752	-	-	-	-	-	-	-	-	-	-	-
	753	-	-	-	-	-	-	-	-	-	-	-
	754	-	-	-	-	-	-	-	-	-	-	-
	755	-	-	-	-	-	-	-	-	-	-	-
	756	-	-	-	-	-	-	-	-	-	-	-
	757	-	-	-	-	-	-	-	-	-	-	-
	758	-	-	-	-	-	-	-	-	-	-	-
	759	-	-	-	-	-	-	-	-	-	-	-
	760	-	-	-	-	-	-	-	-	-	-	-
	761	-	-	-	-	-	-	-	-	-	-	-
	762	-	-	-	-	-	-	-	-	-	-	-
12 mg/kg	763	-	-	-	-	-	-	-	-	-	-	-
	764	-	-	-	-	-	-	-	-	-	-	-
	765	-	-	-	-	-	-	-	-	-	-	-
	766	-	-	-	-	-	-	-	-	-	-	-
	767	-	-	-	-	-	-	-	-	-	-	-
	768	-	-	-	-	-	-	-	-	-	-	-
	769	-	-	-	-	-	-	-	-	-	-	-
	770	-	-	-	-	-	-	-	-	-	-	-
	771	-	-	-	-	-	-	-	-	-	-	-
	772	-	-	-	-	-	-	-	-	-	-	-
	773	-	-	-	-	-	-	-	-	-	-	-
	774	-	-	-	-	-	-	-	-	-	-	-
60 mg/kg	775	-	-	-	-	-	-	-	-	-	-	-
	776	-	-	-	-	-	-	-	-	-	-	-
	777	-	-	-	-	-	-	-	-	-	-	-
	778	-	-	-	-	-	-	-	-	-	-	-
	779	-	-	-	-	-	-	-	-	-	-	-
	780	-	-	-	-	-	-	-	-	-	-	-
	781	-	-	-	-	-	-	-	-	-	-	-
	782	-	-	-	-	-	-	-	-	-	-	-
	783	-	-	-	-	-	-	-	-	-	-	-
	784	-	-	-	-	-	-	-	-	-	-	-
	785	-	-	-	-	-	-	-	-	-	-	-
	786	-	-	-	-	-	-	-	-	-	-	-

Clinical sign: -, No abnormality.

Group and dose	Animal No.	Days										
		1	2	3	4	5	6	7	8	9	10	11
300 mg/kg	787	-	a	a	a	a	a	a	a	a	a	a
	788	-	-	-	a	-	a	a	a	a	a	a
	789	a	a	-	a	a	a	a	a	-	-	-
	790	a, b	-	a	a	a	a	a	a	-	-	-
	791	a	a	a	-	a	a	a	a	-	a	a
	792	a, b	-	a	-	a	a	a	a	a	-	a
	793	a	a	a	a	a	a	a	a	a	a	a
	794	a, b	a	-	a	a	a	a	a	a	a	-
	795	a	a	-	-	a	a	a	a	a	a	a
	796	a	-	a	a	a	a	a	a	a	a	a
	797	a	a	a	-	-	a	a	a	a	a	a
	798	a	-	a	a	a	a	a	a	a	a	a

Clinical sign: -, No abnormality; a, Tremor; b, Hypoactivity.

## Appendix 2 - continued

## Individual clinical signs in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days										
		12	13	14	15	16	17	18	19	20	21	22
Control	751	-	-	-	-	-	-	-	-	-	-	-
	752	-	+	-	-	-	-	-	-	-	-	-
	753	-	-	-	-	-	-	-	-	-	-	-
	754	-	-	-	-	-	-	-	-	-	-	-
	755	-	-	-	-	-	-	-	-	-	-	-
	756	-	-	+	-	-	-	-	-	-	-	-
	757	-	-	-	-	-	-	-	-	-	-	-
	758	-	-	+	-	-	-	-	-	-	-	-
	759	-	-	-	-	-	-	-	-	-	-	-
	760	-	-	-	-	-	-	-	-	-	-	-
	761	-	-	-	-	-	-	-	-	-	-	-
	762	-	-	-	-	-	-	-	-	-	-	-
12 mg/kg	763	-	-	-	-	-	-	-	-	-	-	-
	764	-	-	-	-	-	-	-	-	-	-	-
	765	-	-	-	-	-	-	-	-	-	-	-
	766	-	-	-	-	-	-	-	-	-	-	-
	767	-	-	-	-	-	-	-	-	-	-	-
	768	-	-	-	-	-	-	-	-	-	-	-
	769	-	-	-	-	-	-	-	-	-	-	-
	770	-	-	-	-	-	-	-	-	-	-	-
	771	-	-	-	-	-	-	-	-	-	-	-
	772	-	-	-	-	-	-	-	-	-	-	-
	773	-	-	-	-	-	-	-	-	-	-	-
	774	-	-	-	-	-	-	-	-	-	-	-
60 mg/kg	775	-	-	-	-	-	-	-	-	-	-	-
	776	-	-	-	-	-	-	-	-	-	-	-
	777	-	-	-	-	-	-	-	-	-	-	-
	778	-	-	-	-	-	-	-	-	-	-	-
	779	-	-	-	-	-	-	-	-	-	-	-
	780	-	-	-	-	-	-	-	-	-	-	-
	781	-	-	-	-	-	-	-	-	-	-	-
	782	-	-	-	-	-	-	-	-	-	-	-
	783	-	-	-	-	-	-	-	-	-	-	-
	784	-	-	-	-	-	-	-	-	-	-	-
	785	-	-	-	-	-	-	-	-	-	-	-
	786	-	-	-	-	-	-	-	-	-	-	-

Clinical sign: -, No abnormality.

Appendix 2 - continued

Individual clinical signs in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days										
		12	13	14	15	16	17	18	19	20	21	22
300 mg/kg	787	a	-	-	-	-	-	-	-	-	-	-
	788	-	-	-	-	a	a	-	-	-	-	-
	789	a	-	-	-	-	-	-	-	-	-	-
	790	a	-	-	-	-	-	-	-	-	-	-
	791	-	-	-	-	-	a	-	-	-	-	-
	792	a	a	-	-	-	-	-	-	-	-	-
	793	a	-	a	-	-	-	-	-	-	-	-
	794	-	-	-	-	-	-	-	-	-	-	-
	795	-	-	-	-	-	-	-	-	-	-	-
	796	a	a	-	-	-	-	-	-	-	-	-
	797	a	a	-	a	-	-	-	-	-	-	-
	798	-	-	-	a	-	-	-	-	-	-	-

Clinical sign: -, No abnormality; a, Tremor.

Appendix 2 - continued

Individual clinical signs in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days									
		23	24	25	26	27	28	29	30	31	32
Control	751	-	-	-	-	-	-	-	-	-	-
	752	-	-	-	-	-	-	-	-	-	-
	753	-	-	-	-	-	-	-	-	-	-
	754	-	-	-	-	-	-	-	-	-	-
	755	-	-	-	-	-	-	-	-	-	-
	756	-	-	-	-	-	-	-	-	-	-
	757	-	-	-	-	-	-	-	-	-	-
	758	-	-	-	-	-	-	-	-	-	-
	759	-	-	-	-	-	-	-	-	-	-
	760	-	-	-	-	-	-	-	-	-	-
	761	-	-	-	-	-	-	-	-	-	-
	762	-	-	-	-	-	-	-	-	-	-
12 mg/kg	763	-	-	-	-	-	-	-	-	-	-
	764	-	-	-	-	-	-	-	-	-	-
	765	-	-	-	-	-	-	-	-	-	-
	766	-	-	-	-	-	-	-	-	-	-
	767	-	-	-	-	-	-	-	-	-	-
	768	-	-	-	-	-	-	-	-	-	-
	769	-	-	-	-	-	-	-	-	-	-
	770	-	-	-	-	-	-	-	-	-	-
	771	-	-	-	-	-	-	-	-	-	-
	772	-	-	-	-	-	-	-	-	-	-
	773	-	-	-	-	-	-	-	-	-	-
	774	-	-	-	-	-	-	-	-	-	-
60 mg/kg	775	-	-	-	-	-	-	-	-	-	-
	776	-	-	-	-	-	-	-	-	-	-
	777	-	-	-	-	-	-	-	-	-	-
	778	-	-	-	-	-	-	-	-	-	-
	779	-	-	-	-	-	-	-	-	-	-
	780	-	-	-	-	-	-	-	-	-	-
	781	-	-	-	-	-	-	-	-	-	-
	782	-	-	-	-	-	-	-	-	-	-
	783	-	-	-	-	-	-	-	-	-	-
	784	-	-	-	-	-	-	-	-	-	-
	785	-	-	-	-	-	-	-	-	-	-
	786	-	-	-	-	-	-	-	-	-	-

Clinical sign: -, No abnormality.

Appendix 2 - continued

Study No. 49815

Individual clinical signs in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days										
		23	24	25	26	27	28	29	30	31	32	33
300 mg/kg	787	-	-	-	-	-	-	-	-	-	-	-
	788	-	-	-	-	-	-	-	-	-	-	-
	789	-	-	-	-	-	-	-	-	-	-	-
	790	-	-	-	-	-	-	-	-	-	-	-
	791	-	-	-	-	-	-	-	-	-	-	-
	792	-	-	-	-	-	-	-	-	-	-	-
	793	-	-	-	-	-	-	-	-	-	-	-
	794	-	-	-	-	-	-	-	-	-	-	-
	795	-	-	-	-	-	-	-	-	-	-	-
	796	-	-	-	-	-	-	-	-	-	-	-
	797	-	-	-	-	-	-	-	-	-	-	-
	798	-	-	-	-	-	-	-	-	-	-	-

Clinical sign: -, No abnormality.

Appendix 2 - continued

Study No. 49815

Individual clinical signs in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days										
		34	35	36	37	38	39	40	41	42	43	44
Control	751	-	-	-	-	-	-	-	-	-	-	-
	752	-	-	-	-	-	-	-	-	-	-	-
	753	-	-	-	-	-	-	-	-	-	-	-
	754	-	-	-	-	-	-	-	-	-	-	-
	755	-	-	-	-	-	-	-	-	-	-	-
	756	-	-	-	-	-	-	-	-	-	-	-
	757	-	-	-	-	-	-	-	-	-	-	-
	758	-	-	-	-	-	-	-	-	-	-	-
	759	-	-	-	-	-	-	-	-	-	-	-
	760	-	-	-	-	-	-	-	-	-	-	-
	761	-	-	-	-	-	-	-	-	-	-	-
	762	-	-	-	-	-	-	-	-	-	-	-
12 mg/kg	763	-	-	-	-	-	-	-	-	-	-	-
	764	-	-	-	-	-	-	-	-	-	-	-
	765	-	-	-	-	-	-	-	-	-	-	-
	766	-	-	-	-	-	-	-	-	-	-	-
	767	-	-	-	-	-	-	-	-	-	-	-
	768	-	-	-	-	-	-	-	-	-	-	-
	769	-	-	-	-	-	-	-	-	-	-	-
	770	-	-	-	-	-	-	-	-	-	-	-
	771	-	-	-	-	-	-	-	-	-	-	-
	772	-	-	-	-	-	-	-	-	-	-	-
	773	-	-	-	-	-	-	-	-	-	-	-
	774	-	-	-	-	-	-	-	-	-	-	-
60 mg/kg	775	-	-	-	-	-	-	-	-	-	-	-
	776	-	-	-	-	-	-	-	-	-	-	-
	777	-	-	-	-	-	-	-	-	-	-	-
	778	-	-	-	-	-	-	-	-	-	-	-
	779	-	-	-	-	-	-	-	-	-	-	-
	780	-	-	-	-	-	-	-	-	-	-	-
	781	-	-	-	-	-	-	-	-	-	-	-
	782	-	-	-	-	-	-	-	-	-	-	-
	783	-	-	-	-	-	-	-	-	-	-	-
	784	-	-	-	-	-	-	-	-	-	-	-
	785	-	-	-	-	-	-	-	-	-	-	-
	786	-	-	-	-	-	-	-	-	-	-	-

Clinical sign: -, No abnormality.

Appendix 2 - continued

Study No. 49815

Individual clinical signs in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days										
		34	35	36	37	38	39	40	41	42	43	44
300 mg/kg	787	-	-	-	-	-	-	-	-	-	-	-
	788	-	-	-	-	-	-	-	-	-	-	-
	789	-	-	-	-	-	-	-	-	-	-	-
	790	-	-	-	-	-	-	-	-	-	-	-
	791	-	-	-	-	-	-	-	-	-	-	-
	792	-	-	-	-	-	-	-	-	-	-	-
	793	-	-	-	-	-	-	-	-	-	-	-
	794	-	-	-	-	-	-	-	-	-	-	-
	795	-	-	-	-	-	-	-	-	-	-	-
	796	-	-	-	-	-	-	-	-	-	-	-
	797	-	-	-	-	-	-	-	-	-	-	-
	798	-	-	-	-	-	-	-	-	-	-	-

Clinical sign: -, No abnormality.

Appendix 2 - continued

Study No. 49815

Individual clinical signs in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days										
		45	46	47	48	49	50	51	52	53	54	55
Control	751	-	-	-	-	-	-	-	-	-	-	-
	752	-	-	-	-	-	-	-	-	-	-	-
	753	-	-	-	-	-	-	-	-	-	-	-
	754	-	-	-	-	-	-	-	-	-	-	-
	755	-	-	-	-	-	-	-	-	-	-	-
	756	-	-	-	-	-	-	-	-	-	-	-
	757	-	-	-	-	-	-	-	-	-	-	-
	758	-	-	-	-	-	-	-	-	-	-	-
	759	-	-	-	-	-	-	-	-	-	-	-
	760	-	-	-	-	-	-	-	-	-	-	-
	761	-	-	-	-	-	-	-	-	-	-	-
	762	-	-	-	-	-	-	-	-	-	-	-
12 mg/kg	763	-	-	-	-	-	-	-	-	-	-	-
	764	-	-	-	-	-	-	-	-	-	-	-
	765	-	-	-	-	-	-	-	-	-	-	-
	766	-	-	-	-	-	-	-	-	-	-	-
	767	-	-	-	-	-	-	-	-	-	-	-
	768	-	-	-	-	-	-	-	-	-	-	-
	769	-	-	-	-	-	-	-	-	-	-	-
	770	-	-	-	-	-	-	-	-	-	-	-
	771	-	-	-	-	-	-	-	-	-	-	-
	772	-	-	-	-	-	-	-	-	-	-	-
	773	-	-	-	-	-	-	-	-	-	-	-
	774	-	-	-	-	-	-	-	-	-	-	-
60 mg/kg	775	-	-	-	-	-	-	-	-	-	-	-
	776	-	-	-	-	-	-	-	-	-	-	-
	777	-	-	-	-	-	-	-	-	-	-	-
	778	-	-	-	-	-	-	-	-	-	-	-
	779	-	-	-	-	-	-	-	-	-	-	-
	780	-	-	-	-	-	-	-	-	-	-	-
	781	-	-	-	-	-	-	-	-	-	-	-
	782	-	-	-	-	-	-	-	-	-	-	-
	783	-	-	-	-	-	-	-	-	-	-	-
	784	-	-	-	-	-	-	-	-	-	-	-
	785	-	-	-	-	-	-	-	-	-	-	-
	786	-	-	-	-	-	-	-	-	-	-	-

Clinical sign: -, No abnormality.

Appendix 2 - continued

Study No. 49815  
Individual clinical signs in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days										
		45	46	47	48	49	50	51	52	53	54	55
300 mg/kg	787	-	-	-	-	-	-	-	-	-	-	-
	788	-	-	-	-	-	-	-	-	-	-	-
	789	-	-	-	-	-	-	-	-	-	-	-
	790	-	-	-	-	-	-	-	-	-	-	-
	791	-	-	-	-	-	-	-	-	-	-	-
	792	-	-	-	-	-	-	-	-	-	-	-
	793	-	-	-	-	-	-	-	-	-	-	-
	794	-	-	-	-	-	-	-	-	-	-	-
	795	-	-	-	-	-	-	-	-	-	-	-
	796	-	-	-	-	-	-	-	-	-	-	-
	797	-	-	-	-	-	-	-	-	-	-	-
	798	-	-	-	-	-	-	-	-	-	-	-

Clinical sign: -, No abnormality.

Appendix 2 - continued

Study No. 49815

Individual clinical signs in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days										
		56	57	58	59	60	61	62	63	64	65	66
Control	751	-	-	-	-	-	-	-	-	-	-	-
	752	-	-	-	-	-	-	-	-	-	-	-
	753	-	-	-	-	-	-	-	-	-	-	-
	754	-	-	-	-	-	-	-	-	-	-	-
	755	-	-	-	-	-	-	-	-	-	-	-
	756	-	-	-	-	-	-	-	-	-	-	-
	757	-	-	-	-	-	-	-	-	-	-	-
	758	-	-	-	-	-	-	-	-	-	-	-
	759	-	-	-	-	-	-	-	-	-	-	-
	760	-	-	-	-	-	-	-	-	-	-	-
	761	-	-	-	-	-	-	-	-	-	-	-
	762	-	-	-	-	-	-	-	-	-	-	-
12 mg/kg	763	-	-	-	-	-	-	-	-	-	-	-
	764	-	-	-	-	-	-	-	-	-	-	-
	765	-	-	-	-	-	-	-	-	-	-	-
	766	-	-	-	-	-	-	-	-	-	-	-
	767	-	-	-	-	-	-	-	-	-	-	-
	768	-	-	-	-	-	-	-	-	-	-	-
	769	-	-	-	-	-	-	-	-	-	-	-
	770	-	-	-	-	-	-	-	-	-	-	-
	771	-	-	-	-	-	-	-	-	-	-	-
	772	-	-	-	-	-	-	-	-	-	-	-
	773	-	-	-	-	-	-	-	-	-	-	-
	774	-	-	-	-	-	-	-	-	-	-	-
60 mg/kg	775	-	-	-	-	-	-	-	-	-	-	-
	776	-	-	-	-	-	-	-	-	-	-	-
	777	-	-	-	-	-	-	-	-	-	-	-
	778	-	-	-	-	-	-	-	-	-	-	-
	779	-	-	-	-	-	-	-	-	-	-	-
	780	-	-	-	-	-	-	-	-	-	-	-
	781	-	-	-	-	-	-	-	-	-	-	-
	782	-	-	-	-	-	-	-	-	-	-	-
	783	-	-	-	-	-	-	-	-	-	-	-
	784	-	-	-	-	-	-	-	-	-	-	-
	785	-	-	-	-	-	-	-	-	-	-	-
	786	-	-	-	-	-	-	-	-	-	-	-

Clinical sign: -, No abnormality.

Appendix 2 - continued

Study No. 49815

Individual clinical signs in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days										
		56	57	58	59	60	61	62	63	64	65	66
300 mg/kg	787	-	-	-	-	-	-	-	-	-	-	-
	788	-	-	-	-	-	-	-	-	-	-	-
	789	-	-	-	-	-	-	-	-	-	-	-
	790	-	-	-	-	-	-	-	-	-	-	-
	791	-	-	-	-	-	-	-	-	-	-	-
	792	-	-	-	-	-	-	-	-	-	-	-
	793	-	-	-	-	-	-	-	-	-	-	-
	794	-	-	-	-	-	-	-	-	-	-	-
	795	-	-	-	-	-	-	-	-	-	-	-
	796	-	-	-	-	-	-	-	-	-	-	-
	797	-	-	-	-	-	-	-	-	-	-	-
	798	-	-	-	-	-	-	-	-	-	-	-

Clinical sign: -, No abnormality.

## Appendix 2 - continued

Study No. 49815  
Individual clinical signs in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days										
		67	68	69	70	71	72	73	74	75	76	77
Control	751	-	-	-	-	-	-	-	-	-	-	-
	752	-	-	-	-	-	-	-	-	-	-	-
	753	-	-	-	-	-	-	-	-	-	-	-
	754	-	-	-	-	-	-	-	-	-	-	-
	755	-	-	-	-	-	-	-	-	-	-	-
	756	-	-	-	-	-	-	-	-	-	-	-
	757	-	-	-	-	-	-	-	-	-	-	-
	758	-	-	-	-	-	-	-	-	-	-	-
	759	-	-	-	-	-	-	-	-	-	-	-
	760	-	-	-	-	-	-	-	-	-	-	-
	761	-	-	-	-	-	-	-	-	-	-	-
	762	-	-	-	-	-	-	-	-	-	-	-
12 mg/kg	763	-	-	-	-	-	-	-	-	-	-	-
	764	-	-	-	-	-	-	-	-	-	-	-
	765	-	-	-	-	-	-	-	-	-	-	-
	766	-	-	-	-	-	-	-	-	-	-	-
	767	-	-	-	-	-	-	-	-	-	-	-
	768	-	-	-	-	-	-	-	-	-	-	-
	769	-	-	-	-	-	-	-	-	-	-	-
	770	-	-	-	-	-	-	-	-	-	-	-
	771	-	-	-	-	-	-	-	-	-	-	-
	772	-	-	-	-	-	-	-	-	-	-	-
	773	-	-	-	-	-	-	-	-	-	-	-
	774	-	-	-	-	-	-	-	-	-	-	-
60 mg/kg	775	-	-	-	-	-	-	-	-	-	-	-
	776	-	-	-	-	-	-	-	-	-	-	-
	777	-	-	-	-	-	-	-	-	-	-	-
	778	-	-	-	-	-	-	-	-	-	-	-
	779	-	-	-	-	-	-	-	-	-	-	-
	780	-	-	-	-	-	-	-	-	-	-	-
	781	-	-	-	-	-	-	-	-	-	-	-
	782	-	-	-	-	-	-	-	-	-	-	-
	783	-	-	-	-	-	-	-	-	-	-	-
	784	-	-	-	-	-	-	-	-	-	-	-
	785	-	-	-	-	-	-	-	-	-	-	-
	786	-	-	-	-	-	-	-	-	-	-	-

Clinical sign: -, No abnormality.

Appendix 2 - continued

Study No. 49815

Individual clinical signs in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days										
		67	68	69	70	71	72	73	74	75	76	77
300 mg/kg	787	-	-	-	-	-	-	-	-	-	-	-
	788	-	-	-	-	-	-	-	-	-	-	-
	789	-	-	-	-	-	-	-	-	-	-	-
	790	-	-	-	-	-	-	-	-	-	-	-
	791	-	-	-	-	-	-	-	-	-	-	-
	792	-	-	-	-	-	-	-	-	-	-	-
	793	-	-	-	-	-	-	-	-	-	-	-
	794	-	-	-	-	-	-	-	-	-	-	-
	795	-	-	-	-	-	-	-	-	-	-	-
	796	-	-	-	-	-	-	-	-	-	-	-
	797	-	-	-	-	-	-	-	-	-	-	-
	798	-	-	-	-	-	-	-	-	-	-	-

Clinical sign: -, No abnormality.

## Individual clinical signs in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days			
		78	79	80	81
Control	751				
	752				
	753				
	754				
	755				
	756				
	757	-	-	-	-
	758	-	-	-	-
	759	-	-	-	-
	760	-	-	-	-
	761	-	-	-	-
	762	-	-	-	-
12 mg/kg	763				
	764				
	765				
	766				
	767				
	768				
	769	-	-	-	-
	770	-	-	-	-
	771	-	-	-	-
	772	-	-	-	-
	773	-	-	-	-
	774	-	-	-	-
60 mg/kg	775				
	776				
	777				
	778				
	779				
	780				
	781	-	-	-	-
	782	-	-	-	-
	783	-	-	-	-
	784	-	-	-	-
	785	-	-	-	-
	786	-	-	-	-

Clinical sign: -, No abnormality.

Appendix 2 - continued

Study No. 49815  
Individual clinical signs in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Days			
		78	79	80	81
300 mg/kg	787				
	788				
	789				
	790				
	791				
	792				
	793	-	-	-	-
	794	-	-	-	-
	795	-	-	-	-
	796	-	-	-	-
	797	-	-	-	-
	798	-	-	-	-

Clinical sign: -, No abnormality.



Appendix 3 - continued

Individual body weights in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Body weight(g) on day										
		1	4	8	11	15	18	22	25	29	32	36
300 mg/kg	737	11.9	17.2	26.4	32.8	42.0	55.8					
	738	12.0	18.0	27.0	33.8	44.3	59.0					
	739	11.6	18.4	26.4	34.0	45.1	58.2					
	740	12.0	17.6	26.4	31.9	38.7	47.8					
	741	10.8	16.4	25.1	31.2	41.5	52.8					
	742	11.1	17.7	27.2	34.2	45.1	57.6					
	743	11.0	18.0	28.0	35.8	46.5	60.7	81.8	105.9	143.6	171.2	206.6
	744	11.9	18.6	31.2	39.2	48.4	59.7	81.9	106.0	146.3	173.0	213.7
	745	11.3	19.0	30.1	38.2	47.0	57.5	79.7	100.7	134.7	160.1	198.8
	746	11.1	17.3	26.3	32.2	42.6	56.1	77.1	95.6	126.3	149.1	183.9
	747	12.2	20.2	30.2	40.6	53.8	66.4	89.5	114.5	155.3	188.8	238.5
	748	12.0	18.8	31.5	37.7	47.1	58.8	78.4	100.5	133.8	164.1	199.9

## Appendix 3 - continued

## Individual body weights in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Body weight(g) on day										
		39	43	46	50	53	57	60	64	67	71	74
Control	701											
	702											
	703											
	704											
	705											
	706											
	707	235.3	272.7	305.3	346.9	377.7	410.7	426.8	451.8	476.2	495.9	513.3
	708	235.1	272.3	298.8	335.5	361.4	384.2	406.6	426.2	438.9	462.3	468.0
	709	256.2	295.9	324.6	364.2	395.8	426.7	444.4	470.0	491.9	508.3	524.6
	710	271.6	317.6	348.3	386.8	414.2	449.8	468.2	498.9	511.8	541.9	559.1
	711											
	712	271.0	319.0	351.6	397.1	433.6	465.2	493.4	524.2	539.2	563.6	574.7
12 mg/kg	713											
	714											
	715											
	716											
	717											
	718											
	719	255.4	291.6	317.4	345.7	367.4	386.4	403.1	421.6	430.4	446.8	453.0
	720	228.3	261.6	288.4	327.6	355.1	380.0	400.9	427.1	440.6	464.5	471.5
	721	236.2	267.9	293.0	325.8	347.3	375.7	395.2	416.5	426.8	442.3	453.4
	722	260.5	295.0	325.6	361.1	387.7	416.1	433.3	462.1	476.2	501.1	509.1
	723	270.8	316.2	348.4	388.9	419.0	448.3	461.9	482.8	488.2	510.3	526.9
	724	235.6	276.0	298.7	336.5	361.6	395.8	416.4	441.8	459.8	479.6	493.7
60 mg/kg	725											
	726											
	727											
	728											
	729											
	730											
	731	234.5	262.0	297.0	334.6	356.2	377.8	398.4	413.2	431.0	442.6	454.5
	732	232.0	261.6	289.9	324.4	351.0	379.1	403.4	430.6	437.5	466.9	480.2
	733	244.0	282.0	309.4	339.7	367.4	392.4	410.6	434.7	446.4	464.6	471.7
	734	230.7	265.8	294.5	327.3	346.6	375.6	391.8	411.0	428.5	447.0	457.6
	735	258.4	297.5	323.6	367.3	399.6	432.9	454.7	480.4	501.7	525.7	536.1
	736	262.3	301.9	333.8	377.3	408.5	446.9	469.7	496.7	515.2	540.0	555.4

Appendix 3 - continued

Study No. 49815

Individual body weights in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Body weight(g) on day										
		39	43	46	50	53	57	60	64	67	71	74
300 mg/kg	737											
	738											
	739											
	740											
	741											
	742											
	743	234.6	275.3	304.2	340.6	368.8	401.4	417.5	435.0	449.1	472.9	479.1
	744	243.8	279.2	306.3	348.1	373.5	398.0	422.0	445.8	471.6	485.7	498.1
	745	223.9	255.8	278.9	312.2	338.2	358.7	384.2	399.8	425.1	442.2	453.0
	746	207.6	233.0	259.0	293.0	316.1	343.1	355.4	378.3	391.4	410.3	419.8
	747	267.7	313.0	344.0	389.6	416.2	448.2	470.9	495.6	505.8	542.6	553.6
	748	227.3	265.0	295.2	339.8	368.2	401.9	418.4	447.3	464.0	487.7	494.1

Individual body weights in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Body weight(g) on day	
		78	81
Control	701		
	702		
	703		
	704		
	705		
	706		
	707	535.0	541.7
	708	488.0	500.9
	709	537.7	547.9
	710	571.4	591.7
	711		
	712	587.4	600.8
12 mg/kg	713		
	714		
	715		
	716		
	717		
	718		
	719	463.0	471.9
	720	482.5	494.5
	721	465.6	473.1
	722	518.9	535.3
	723	527.0	535.3
	724	506.9	513.2
60 mg/kg	725		
	726		
	727		
	728		
	729		
	730		
	731	464.1	471.7
	732	484.7	495.8
	733	484.2	496.7
	734	474.4	485.7
	735	545.5	551.9
	736	561.8	570.9

Individual body weights in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Body weight(g) on day	
		78	81
300 mg/kg	737		
	738		
	739		
	740		
	741		
	742		
	743	489.1	503.4
	744	513.3	530.2
	745	466.8	476.9
	746	433.2	441.3
	747	564.2	573.2
	748	510.1	519.9

Appendix 4 Individual body weights in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Body weight(g) on day										
		1	4	8	11	15	18	22	25	29	32	36
Control	751	10.8	15.9	25.5	30.2	39.2	49.6					
	752	9.8	15.3	25.4	32.2	43.1	54.3					
	753	10.9	17.8	29.2	36.0	45.0	57.0					
	754	9.4	14.1	22.9	29.9	36.6	42.7					
	755	10.1	14.8	22.3	28.1	37.3	47.1					
	756	10.4	16.8	27.8	37.0	47.4	62.3					
	757	10.7	17.1	27.1	34.9	46.1	58.9	79.8	101.8	130.0	149.2	172.9
	758	10.5	16.6	25.2	33.9	43.7	54.4	73.8	93.9	127.2	144.0	161.7
	759	10.7	17.2	29.6	37.9	48.7	56.2	75.4	94.1	128.7	151.9	185.9
	760	11.3	18.4	28.7	37.7	48.1	62.1	83.7	105.0	140.3	160.4	186.6
	761	11.6	18.0	30.3	39.0	51.8	61.9	77.7	93.3	122.5	145.1	170.3
	762	10.8	17.5	29.5	38.3	49.2	62.0	80.1	95.5	121.2	137.3	161.6
12 mg/kg	763	10.9	16.6	25.7	31.8	40.2	52.8					
	764	9.7	15.0	25.9	33.8	43.1	55.8					
	765	10.8	17.4	26.9	35.2	44.8	56.0					
	766	9.6	14.6	22.7	28.8	35.7	45.1					
	767	10.0	15.0	23.1	29.5	38.5	48.4					
	768	10.1	16.9	28.0	35.5	45.8	57.7					
	769	11.3	18.6	29.2	36.7	46.8	58.0	77.9	96.8	125.6	145.7	171.1
	770	10.2	16.7	26.8	34.7	45.5	55.6	74.1	94.6	129.8	151.9	172.1
	771	10.7	17.5	28.0	35.2	44.5	55.2	74.6	93.4	119.8	142.7	165.1
	772	11.6	18.5	29.4	36.8	46.6	58.6	78.7	98.7	128.1	150.4	173.4
	773	11.3	17.0	29.3	39.5	52.0	64.2	84.8	104.2	132.5	157.9	182.1
	774	11.0	18.1	28.4	36.7	48.8	62.3	81.4	99.6	126.8	144.0	164.5
60 mg/kg	775	10.4	15.5	24.7	31.3	39.0	52.2					
	776	9.7	15.3	24.3	32.5	42.8	53.8					
	777	10.8	17.0	26.5	33.2	42.6	54.6					
	778	9.6	14.2	21.9	27.9	34.1	42.3					
	779	10.1	15.5	24.7	31.8	40.1	49.3					
	780	10.5	17.0	28.7	36.5	45.9	56.9					
	781	11.3	17.7	28.8	35.6	45.2	56.9	77.1	93.8	120.8	139.9	164.6
	782	10.6	16.8	27.7	34.6	45.1	56.1	74.0	93.9	124.3	146.1	171.3
	783	11.1	17.5	28.9	37.6	45.8	56.7	73.6	91.6	117.6	135.7	162.2
	784	11.1	17.9	28.7	36.0	45.9	57.3	76.0	95.3	124.8	147.0	171.2
	785	11.5	16.6	28.3	37.7	50.4	60.6	77.6	97.7	125.3	146.1	164.5
	786	10.9	17.8	29.6	38.0	47.7	57.7	78.9	101.6	130.8	152.6	181.0

Appendix 4 - continued

Study No. 49815

## Individual body weights in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Body weight(g) on day										
		1	4	8	11	15	18	22	25	29	32	36
300 mg/kg	787	10.7	16.0	24.9	30.5	38.7	50.5					
	788	10.0	15.8	25.7	33.8	44.0	55.6					
	789	11.4	17.7	28.1	35.5	45.2	57.8					
	790	9.5	14.0	21.1	26.0	31.1	39.8					
	791	10.0	14.7	23.1	30.6	37.1	46.1					
	792	10.4	16.6	27.3	35.0	44.8	56.3					
	793	11.2	17.7	28.2	36.6	47.1	59.7	82.2	103.4	136.0	159.3	183.5
	794	10.9	16.9	26.2	34.5	43.3	54.4	75.0	95.4	127.8	147.5	169.0
	795	10.8	17.8	28.0	36.6	47.5	58.7	79.7	98.3	126.1	149.9	171.0
	796	11.1	17.1	27.8	34.2	44.8	55.9	77.8	98.7	130.1	149.0	176.0
	797	11.4	17.9	28.7	37.4	50.3	62.8	82.8	101.8	134.5	154.9	182.4
	798	10.8	17.0	28.9	36.3	47.5	61.4	76.1	96.2	124.9	145.4	169.3

## Appendix 4 - continued

Study No. 49815

Individual body weights in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Body weight(g) on day										
		39	43	46	50	53	57	60	64	67	71	74
Control	751											
	752											
	753											
	754											
	755											
	756											
	757	184.9	200.6	215.1	228.5	237.5	251.5	255.8	264.2	277.5	285.7	292.2
	758	179.9	194.6	204.7	221.9	231.6	240.7	243.0	252.8	264.7	270.7	275.6
	759	209.3	233.1	244.2	269.7	284.8	303.6	307.2	317.6	328.1	334.2	349.2
	760	201.3	216.6	222.1	237.3	259.7	272.9	277.7	288.6	291.1	297.4	293.1
	761	185.0	198.0	212.8	220.8	237.4	252.3	260.6	272.0	272.9	286.2	293.9
	762	173.4	187.5	198.6	213.8	221.3	233.3	237.9	248.8	254.8	263.9	271.8
12 mg/kg	763											
	764											
	765											
	766											
	767											
	768											
	769	182.5	197.7	204.0	220.4	223.9	233.7	242.8	253.1	259.8	269.0	269.3
	770	189.2	201.9	214.0	227.0	239.6	259.4	264.6	274.0	277.6	290.1	303.3
	771	179.7	197.1	205.9	217.0	228.4	235.9	245.0	251.1	253.7	260.5	269.0
	772	186.3	202.1	210.7	218.9	224.9	235.6	247.1	259.6	263.1	270.5	272.0
	773	201.2	219.3	233.1	250.6	267.5	283.2	282.3	295.5	313.7	321.3	322.6
	774	179.2	192.1	199.6	211.3	210.1	220.6	231.9	242.9	245.5	254.0	254.6
60 mg/kg	775											
	776											
	777											
	778											
	779											
	780											
	781	177.2	195.0	198.5	210.9	221.8	232.3	241.4	246.8	251.6	260.6	259.0
	782	187.2	202.2	207.9	225.8	228.3	243.7	261.8	277.9	284.4	291.2	292.9
	783	170.4	182.0	185.8	195.4	214.9	221.8	234.7	238.5	245.2	251.6	252.5
	784	186.8	197.3	205.2	223.1	227.0	242.7	253.9	266.2	273.2	277.6	282.4
	785	175.6	188.5	192.3	199.9	216.1	232.7	234.3	243.9	245.1	252.9	252.0
	786	189.9	201.6	220.3	237.1	250.4	257.5	268.1	278.3	272.1	278.8	287.8

Appendix 4 - continued

Study No. 49815  
Individual body weights in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Body weight(g) on day										
		39	43	46	50	53	57	60	64	67	71	74
300 mg/kg	787											
	788											
	789											
	790											
	791											
	792											
	793	196.9	214.3	230.9	247.5	264.3	278.0	288.5	296.1	293.9	303.9	317.1
	794	182.5	198.6	206.8	221.2	223.7	234.8	250.2	257.0	264.7	272.9	273.1
	795	183.9	197.0	210.7	223.7	231.2	240.7	240.7	249.3	262.2	272.5	276.3
	796	187.4	205.2	220.0	235.7	245.8	255.7	260.9	271.8	291.7	302.2	309.0
	797	194.8	211.0	221.2	237.9	256.0	266.1	276.0	289.7	285.9	293.2	290.5
	798	177.9	188.8	186.6	199.7	213.3	222.4	232.5	238.2	241.0	249.9	240.5

Group and dose	Animal No.	Body weight(g) on day	
		78	81
Control	751		
	752		
	753		
	754		
	755		
	756		
	757	301.4	305.9
	758	282.8	282.6
	759	352.2	356.0
	760	299.1	315.1
	761	302.7	304.8
	762	275.1	277.1
12 mg/kg	763		
	764		
	765		
	766		
	767		
	768		
	769	277.4	274.7
	770	310.7	315.8
	771	269.8	276.8
	772	282.2	279.4
	773	331.0	336.2
	774	260.0	260.8
60 mg/kg	775		
	776		
	777		
	778		
	779		
	780		
	781	257.5	264.8
	782	295.1	301.1
	783	252.5	272.2
	784	286.6	290.1
	785	255.6	260.7
	786	296.4	299.3

Appendix 4 - continued

Study No. 49815  
Individual body weights in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Body weight(g) on day	
		78	81
300 mg/kg	787		
	788		
	789		
	790		
	791		
	792		
	793	319.6	327.1
	794	277.3	273.7
	795	282.3	285.8
	796	311.4	314.2
	797	293.5	301.2
	798	241.4	253.3

Appendix 5 Individual food consumption in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Food consumption(g) on day										
		22	25	29	32	36	39	43	46	50	53	57
Control	707	11.7	15.0	18.2	21.0	25.4	22.9	25.9	30.2	29.7	31.4	33.2
	708	10.1	13.4	17.2	21.1	25.3	24.3	27.5	29.6	30.9	30.1	28.6
	709	10.8	14.0	19.1	20.8	25.9	28.0	28.4	28.1	29.7	30.8	32.4
	710	12.1	17.0	19.9	25.8	27.7	28.8	31.1	34.6	33.4	32.8	35.9
	712	10.9	14.8	21.0	23.5	28.4	28.4	30.8	32.8	32.2	36.3	34.5
12 mg/kg	719	10.3	13.4	18.6	23.0	27.6	27.2	28.1	26.3	26.9	27.7	26.1
	720	12.0	16.3	20.5	20.5	21.3	24.2	25.8	28.4	28.6	28.4	28.6
	721	10.8	14.0	17.5	21.0	21.7	22.8	22.3	25.8	28.9	23.9	26.5
	722	11.8	16.1	20.6	25.1	27.8	29.6	30.1	28.4	30.0	30.1	29.5
	723	12.2	16.1	23.0	27.7	26.2	29.9	29.8	32.3	30.4	31.4	30.6
	724	11.5	15.8	19.3	19.6	21.8	23.3	26.5	25.5	26.8	26.2	30.7
60 mg/kg	731	10.6	14.1	18.0	21.5	21.4	24.6	24.1	28.7	31.4	29.9	29.3
	732	10.8	15.7	17.2	22.2	26.2	24.1	24.2	26.4	29.3	24.5	29.6
	733	12.4	14.3	18.4	20.8	26.1	24.6	28.2	28.1	27.6	30.2	28.9
	734	11.4	14.2	18.1	21.5	22.5	24.1	22.4	27.5	26.6	26.3	27.9
	735	13.1	16.7	20.0	23.9	27.7	28.0	29.5	30.6	31.1	31.4	32.8
	736	11.1	15.8	19.4	22.4	24.7	30.0	28.1	31.7	32.9	31.6	35.4
300 mg/kg	743	12.1	15.9	20.4	21.2	22.7	24.4	29.3	27.8	30.6	29.0	32.2
	744	11.8	15.4	20.7	23.1	26.7	27.1	27.2	31.2	32.6	33.2	32.2
	745	10.9	15.4	20.2	20.5	25.2	25.3	25.5	26.7	26.2	31.7	28.7
	746	12.3	13.7	17.4	19.0	20.6	22.8	23.2	27.6	27.0	24.8	26.6
	747	13.1	16.5	21.7	27.5	29.0	30.4	32.7	35.0	37.5	36.7	35.1
	748	11.9	13.9	18.2	20.4	22.9	23.5	24.4	28.0	31.7	31.2	32.3

## Appendix 5 - continued

## Individual food consumption in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Food consumption(g) on day					
		60	64	67	71	74	78
Control	707	32.6	32.1	35.4	31.6	33.3	36.6
	708	30.2	31.1	28.8	31.3	31.0	31.6
	709	31.0	32.4	34.0	30.1	33.4	33.4
	710	34.4	35.9	34.8	36.2	37.7	33.0
	712	35.3	35.6	34.7	33.7	33.7	32.9
12 mg/kg	719	26.1	25.2	25.3	27.0	22.7	26.6
	720	28.7	28.7	29.1	32.7	29.4	29.4
	721	27.8	27.9	26.8	25.5	27.9	25.1
	722	32.2	34.6	32.0	33.4	31.2	31.7
	723	30.4	27.6	25.5	29.0	31.0	26.1
	724	30.1	30.2	30.2	30.9	27.9	28.4
60 mg/kg	731	30.0	30.7	29.5	27.9	27.8	28.4
	732	28.4	30.4	27.7	30.9	28.6	28.8
	733	29.6	30.6	28.8	29.5	30.9	27.5
	734	27.4	27.4	26.9	27.9	24.9	29.9
	735	33.5	34.6	32.9	33.6	34.0	29.5
	736	34.5	32.7	31.8	32.6	34.6	33.9
300 mg/kg	743	32.2	30.0	29.0	31.5	29.4	29.9
	744	34.5	33.4	37.0	32.6	35.5	34.6
	745	32.8	28.8	29.4	31.0	30.7	30.4
	746	24.0	25.2	24.6	29.5	26.6	27.2
	747	37.1	33.6	33.5	39.5	33.4	34.1
	748	31.0	34.2	29.2	29.3	31.2	29.6

Appendix 6 Individual food consumption in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Food consumption(g) on day										
		22	25	29	32	36	39	43	46	50	53	57
Control	757	10.7	14.0	17.4	17.6	20.4	19.4	20.7	23.2	21.1	20.1	21.6
	758	9.4	14.2	17.6	18.1	16.9	18.5	18.8	20.0	20.3	21.8	19.8
	759	10.3	12.1	16.9	19.1	20.7	21.9	22.3	20.4	24.3	22.5	26.2
	760	11.9	14.5	18.1	18.4	21.7	21.6	20.9	17.1	16.1	22.2	23.0
	761	9.2	11.2	14.5	17.9	17.7	17.0	18.3	20.9	18.5	18.8	20.4
	762	11.3	14.1	15.2	15.9	17.2	17.6	18.4	18.7	19.6	18.9	20.6
12 mg/kg	769	10.1	12.7	15.7	16.8	20.6	18.9	18.3	18.4	19.6	16.4	16.1
	770	10.3	13.4	19.2	21.4	19.7	22.4	20.1	22.2	23.4	24.6	26.1
	771	10.4	11.9	15.0	17.7	18.4	20.7	19.2	20.2	18.6	19.0	18.5
	772	11.2	14.2	18.2	19.3	19.5	21.6	21.2	22.5	21.1	16.7	17.5
	773	11.8	14.2	16.3	18.9	19.0	20.4	21.1	22.9	24.7	25.4	25.7
	774	10.5	15.1	15.8	15.9	15.9	18.4	17.2	18.1	19.9	12.5	16.0
60 mg/kg	781	10.6	11.7	15.1	16.0	18.9	18.8	18.6	16.3	17.2	16.9	18.8
	782	10.2	13.5	16.9	17.0	20.6	21.2	23.0	22.8	22.8	15.6	20.4
	783	9.8	13.6	15.7	16.5	19.5	20.3	18.3	14.9	14.5	20.1	18.0
	784	10.1	12.7	16.3	18.6	18.3	20.4	19.2	18.4	20.2	15.6	19.8
	785	10.1	13.5	16.7	18.2	17.0	19.2	18.5	15.0	13.2	19.1	22.1
	786	11.5	16.1	19.0	20.8	22.8	17.5	16.7	22.2	22.2	21.1	22.9
300 mg/kg	793	10.8	13.6	17.9	20.2	21.1	16.5	16.1	20.8	21.4	23.1	23.4
	794	11.5	13.6	18.6	18.7	18.7	18.9	19.1	23.4	21.9	17.3	14.4
	795	10.7	13.9	17.7	18.5	17.7	17.7	17.3	20.0	19.0	19.1	19.8
	796	10.6	12.9	18.1	18.6	19.8	18.3	23.0	23.1	22.0	21.1	20.6
	797	11.2	13.9	17.3	18.3	18.8	18.8	19.5	17.4	17.0	22.0	19.8
	798	10.7	14.0	15.8	16.7	18.2	18.0	19.2	11.1	12.8	16.7	15.5

## Appendix 6 - continued

## Individual food consumption in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Food consumption(g) on day						
		60	64	67	71	74	78	81
Control	757	19.1	20.6	23.0	23.9	23.1	21.5	20.2
	758	18.6	16.7	19.7	19.8	20.1	20.3	21.1
	759	22.4	22.7	23.8	22.2	24.9	23.9	22.7
	760	21.8	22.0	22.3	20.6	16.2	16.5	21.0
	761	19.0	20.3	19.0	20.8	23.0	20.9	18.7
	762	20.0	21.1	20.4	19.8	22.3	19.9	19.4
12 mg/kg	769	18.2	21.5	19.6	21.7	19.1	18.8	16.1
	770	24.0	24.2	21.3	21.4	26.8	23.2	22.3
	771	19.7	17.7	15.3	14.9	17.7	17.0	17.6
	772	22.0	21.5	22.5	22.8	19.5	20.4	16.0
	773	19.3	21.3	27.6	25.8	22.5	23.5	20.6
	774	16.6	19.5	19.2	18.2	18.2	18.1	15.2
60 mg/kg	781	20.9	17.9	16.4	16.8	14.7	14.5	16.0
	782	25.3	28.3	24.2	24.9	20.3	21.5	18.0
	783	24.3	22.1	22.0	22.8	18.1	16.4	21.8
	784	21.2	22.4	20.8	20.5	18.4	16.8	17.5
	785	20.9	21.6	19.3	21.8	14.5	16.5	19.2
	786	26.8	26.2	17.6	16.5	21.3	24.7	19.6
300 mg/kg	793	24.5	24.4	19.2	19.3	21.8	19.0	22.1
	794	24.8	20.7	21.8	23.7	20.8	20.7	15.9
	795	15.2	16.4	20.6	21.5	20.2	23.8	20.0
	796	19.0	22.1	26.0	23.9	25.3	22.3	21.0
	797	21.1	21.8	19.7	19.8	16.7	16.5	18.8
	798	19.6	17.3	20.5	20.4	10.6	10.8	17.5

Appendix 7 Individual postnatal differentiation in F<sub>1</sub> offspring

Study No. 49815

Group and dose		Control					
Male		701	702	703	704	705	706
Animal No.							
Pinna detachment	( 4 days)	1/1	1/1	1/1	1/1	1/1	1/1
Piliation	( 8 days)	1/1	1/1	1/1	1/1	1/1	1/1
Incisor eruption	(10 days)	1/1	1/1	1/1	1/1	1/1	1/1
	(11 days)	-	-	-	-	-	-
	(12 days)	-	-	-	-	-	-
Eyelid separation	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Gait	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Descensus testis	(21 days)	1/1	1/1	1/1	1/1	1/1	1/1
Cleavage of the balanopreputial gland							
	(42 days)	-	-	-	-	-	-
	(43 days)	-	-	-	-	-	-
	(44 days)	-	-	-	-	-	-
	(45 days)	-	-	-	-	-	-
	(46 days)	-	-	-	-	-	-
	(47 days)	-	-	-	-	-	-
	(48 days)	-	-	-	-	-	-
	(49 days)	-	-	-	-	-	-
	(50 days)	-	-	-	-	-	-
	(51 days)	-	-	-	-	-	-
	(52 days)	-	-	-	-	-	-
	(53 days)	-	-	-	-	-	-
	(54 days)	-	-	-	-	-	-
Female							
Animal No.		751	752	753	754	755	756
Pinna detachment	( 4 days)	1/1	1/1	1/1	1/1	1/1	1/1
Piliation	( 8 days)	1/1	1/1	1/1	1/1	1/1	1/1
Incisor eruption	(10 days)	1/1	1/1	1/1	1/1	1/1	1/1
	(11 days)	-	-	-	-	-	-
Eyelid separation	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Gait	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Vaginal opening	(42 days)	-	-	-	-	-	-
	(43 days)	-	-	-	-	-	-

Appendix 7 - continued Individual postnatal differentiation in F<sub>1</sub> offspring

Study No. 49815

Group and dose		Control					
Male		707	708	709	710	711	712
Animal No.							
Pinna detachment	( 4 days)	1/1	1/1	1/1	1/1	1/1	1/1
Piliation	( 8 days)	1/1	1/1	1/1	1/1	1/1	1/1
Incisor eruption	(10 days)	1/1	1/1	1/1	1/1	1/1	1/1
	(11 days)	-	-	-	-	-	-
	(12 days)	-	-	-	-	-	-
Eyelid separation	(15 days)	1/1	1/1	1/1	1/1	-	1/1
Gait	(15 days)	1/1	1/1	1/1	1/1	-	1/1
Descensus testis	(21 days)	1/1	1/1	1/1	1/1	-	1/1
Cleavage of the balanopreputial gland							
	(42 days)	1/1	0/1	0/1	0/1	-	1/1
	(43 days)	-	0/1	1/1	1/1	-	-
	(44 days)	-	0/1	-	-	-	-
	(45 days)	-	1/1	-	-	-	-
	(46 days)	-	-	-	-	-	-
	(47 days)	-	-	-	-	-	-
	(48 days)	-	-	-	-	-	-
	(49 days)	-	-	-	-	-	-
	(50 days)	-	-	-	-	-	-
	(51 days)	-	-	-	-	-	-
	(52 days)	-	-	-	-	-	-
	(53 days)	-	-	-	-	-	-
	(54 days)	-	-	-	-	-	-
Female							
Animal No.							
		757	758	759	760	761	762
Pinna detachment	( 4 days)	1/1	1/1	1/1	1/1	1/1	1/1
Piliation	( 8 days)	1/1	1/1	1/1	1/1	1/1	1/1
Incisor eruption	(10 days)	1/1	1/1	0/1	0/1	1/1	1/1
	(11 days)	-	-	1/1	1/1	-	-
Eyelid separation	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Gait	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Vaginal opening	(42 days)	1/1	1/1	1/1	1/1	1/1	1/1
	(43 days)	-	-	-	-	-	-

eg

Appendix 7 - continued Individual postnatal differentiation in F<sub>1</sub> offspring

Study No. 49815

Group and dose		12 mg/kg					
Male		713	714	715	716	717	718
Animal No.							
Pinna detachment	( 4 days)	1/1	1/1	1/1	1/1	1/1	1/1
Piliation	( 8 days)	1/1	1/1	1/1	1/1	1/1	1/1
Incisor eruption	(10 days)	1/1	1/1	1/1	1/1	1/1	0/1
	(11 days)	-	-	-	-	-	0/1
	(12 days)	-	-	-	-	-	1/1
Eyelid separation	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Gait	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Descensus testis	(21 days)	1/1	1/1	1/1	1/1	1/1	1/1
Cleavage of the balanopreputial gland							
	(42 days)	-	-	-	-	-	-
	(43 days)	-	-	-	-	-	-
	(44 days)	-	-	-	-	-	-
	(45 days)	-	-	-	-	-	-
	(46 days)	-	-	-	-	-	-
	(47 days)	-	-	-	-	-	-
	(48 days)	-	-	-	-	-	-
	(49 days)	-	-	-	-	-	-
	(50 days)	-	-	-	-	-	-
	(51 days)	-	-	-	-	-	-
	(52 days)	-	-	-	-	-	-
	(53 days)	-	-	-	-	-	-
	(54 days)	-	-	-	-	-	-
Female							
Animal No.		763	764	765	766	767	768
Pinna detachment	( 4 days)	1/1	1/1	1/1	1/1	1/1	1/1
Piliation	( 8 days)	1/1	1/1	1/1	1/1	1/1	1/1
Incisor eruption	(10 days)	1/1	1/1	1/1	1/1	1/1	0/1
	(11 days)	-	-	-	-	-	1/1
Eyelid separation	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Gait	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Vaginal opening	(42 days)	-	-	-	-	-	-
	(43 days)	-	-	-	-	-	-

Appendix 7 - continued Individual postnatal differentiation in F<sub>1</sub> offspring

Study No. 49815

Group and dose		12 mg/kg					
Male		719	720	721	722	723	724
Animal No.							
Pinna detachment	( 4 days)	1/1	1/1	1/1	1/1	1/1	1/1
Piliation	( 8 days)	1/1	1/1	1/1	1/1	1/1	1/1
Incisor eruption	(10 days)	1/1	1/1	1/1	1/1	1/1	1/1
	(11 days)	-	-	-	-	-	-
	(12 days)	-	-	-	-	-	-
Eyelid separation	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Gait	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Descensus testis	(21 days)	1/1	1/1	1/1	1/1	1/1	1/1
Cleavage of the balanopreputial gland							
	(42 days)	1/1	0/1	0/1	0/1	1/1	0/1
	(43 days)	-	0/1	0/1	0/1	-	0/1
	(44 days)	-	0/1	0/1	1/1	-	0/1
	(45 days)	-	1/1	0/1	-	-	0/1
	(46 days)	-	-	0/1	-	-	0/1
	(47 days)	-	-	1/1	-	-	0/1
	(48 days)	-	-	-	-	-	1/1
	(49 days)	-	-	-	-	-	-
	(50 days)	-	-	-	-	-	-
	(51 days)	-	-	-	-	-	-
	(52 days)	-	-	-	-	-	-
	(53 days)	-	-	-	-	-	-
	(54 days)	-	-	-	-	-	-
Female							
Animal No.		769	770	771	772	773	774
Pinna detachment	( 4 days)	1/1	1/1	1/1	1/1	1/1	1/1
Piliation	( 8 days)	1/1	1/1	1/1	1/1	1/1	1/1
Incisor eruption	(10 days)	1/1	1/1	1/1	1/1	1/1	1/1
	(11 days)	-	-	-	-	-	-
Eyelid separation	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Gait	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Vaginal opening	(42 days)	1/1	1/1	1/1	1/1	1/1	1/1
	(43 days)	-	-	-	-	-	-

Appendix 7 - continued Individual postnatal differentiation in F<sub>1</sub> offspring

Study No. 49815

Group and dose		60 mg/kg					
		725	726	727	728	729	730
<b>Male</b>							
Animal No.							
Pinna detachment	( 4 days)	1/1	1/1	1/1	1/1	1/1	1/1
Piliation	( 8 days)	1/1	1/1	1/1	1/1	1/1	1/1
Incisor eruption	(10 days)	1/1	1/1	1/1	1/1	1/1	1/1
	(11 days)	-	-	-	-	-	-
	(12 days)	-	-	-	-	-	-
Eyelid separation	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Gait	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Descensus testis	(21 days)	1/1	1/1	1/1	1/1	1/1	1/1
Cleavage of the balanopreputial gland							
	(42 days)	-	-	-	-	-	-
	(43 days)	-	-	-	-	-	-
	(44 days)	-	-	-	-	-	-
	(45 days)	-	-	-	-	-	-
	(46 days)	-	-	-	-	-	-
	(47 days)	-	-	-	-	-	-
	(48 days)	-	-	-	-	-	-
	(49 days)	-	-	-	-	-	-
	(50 days)	-	-	-	-	-	-
	(51 days)	-	-	-	-	-	-
	(52 days)	-	-	-	-	-	-
	(53 days)	-	-	-	-	-	-
	(54 days)	-	-	-	-	-	-
<b>Female</b>							
Animal No.							
Pinna detachment	( 4 days)	1/1	1/1	1/1	1/1	1/1	1/1
Piliation	( 8 days)	1/1	1/1	1/1	1/1	1/1	1/1
Incisor eruption	(10 days)	1/1	0/1	1/1	1/1	1/1	1/1
	(11 days)	-	1/1	-	-	-	-
Eyelid separation	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Gait	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Vaginal opening	(42 days)	-	-	-	-	-	-
	(43 days)	-	-	-	-	-	-

Appendix 7 - continued Individual postnatal differentiation in F<sub>1</sub> offspring

Study No. 49815

Group and dose		60 mg/kg					
		731	732	733	734	735	736
<b>Male</b>							
Animal No.							
Pinna detachment	( 4 days)	1/1	1/1	1/1	1/1	1/1	1/1
Piliation	( 8 days)	1/1	1/1	1/1	1/1	1/1	1/1
Incisor eruption	(10 days)	1/1	1/1	1/1	1/1	1/1	1/1
	(11 days)	-	-	-	-	-	-
	(12 days)	-	-	-	-	-	-
Eyelid separation	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Gait	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Descensus testis	(21 days)	1/1	1/1	1/1	1/1	1/1	1/1
Cleavage of the balanopreputial gland							
	(42 days)	0/1	0/1	0/1	1/1	0/1	1/1
	(43 days)	0/1	0/1	0/1	-	0/1	-
	(44 days)	0/1	0/1	0/1	-	0/1	-
	(45 days)	0/1	1/1	0/1	-	1/1	-
	(46 days)	0/1	-	0/1	-	-	-
	(47 days)	0/1	-	0/1	-	-	-
	(48 days)	0/1	-	0/1	-	-	-
	(49 days)	0/1	-	1/1	-	-	-
	(50 days)	0/1	-	-	-	-	-
	(51 days)	0/1	-	-	-	-	-
	(52 days)	0/1	-	-	-	-	-
	(53 days)	0/1	-	-	-	-	-
	(54 days)	1/1	-	-	-	-	-
<b>Female</b>							
Animal No.							
Pinna detachment	( 4 days)	1/1	1/1	1/1	1/1	1/1	1/1
Piliation	( 8 days)	1/1	1/1	1/1	1/1	1/1	1/1
Incisor eruption	(10 days)	1/1	1/1	1/1	0/1	1/1	1/1
	(11 days)	-	-	-	1/1	-	-
Eyelid separation	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Gait	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Vaginal opening	(42 days)	1/1	1/1	1/1	1/1	1/1	0/1
	(43 days)	-	-	-	-	-	1/1

Appendix 7 - continued Individual postnatal differentiation in F<sub>1</sub> offspring

Study No. 49815

Group and dose		300 mg/kg					
		737	738	739	740	741	742
<b>Male</b>							
Animal No.							
Pinna detachment	( 4 days)	1/1	1/1	1/1	1/1	1/1	1/1
Piliation	( 8 days)	1/1	1/1	1/1	1/1	1/1	1/1
Incisor eruption	(10 days)	1/1	1/1	1/1	0/1	1/1	1/1
	(11 days)	-	-	-	1/1	-	-
	(12 days)	-	-	-	-	-	-
Eyelid separation	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Gait	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Descensus testis	(21 days)	1/1	1/1	1/1	1/1	1/1	1/1
Cleavage of the balanopreputial gland							
	(42 days)	-	-	-	-	-	-
	(43 days)	-	-	-	-	-	-
	(44 days)	-	-	-	-	-	-
	(45 days)	-	-	-	-	-	-
	(46 days)	-	-	-	-	-	-
	(47 days)	-	-	-	-	-	-
	(48 days)	-	-	-	-	-	-
	(49 days)	-	-	-	-	-	-
	(50 days)	-	-	-	-	-	-
	(51 days)	-	-	-	-	-	-
	(52 days)	-	-	-	-	-	-
	(53 days)	-	-	-	-	-	-
	(54 days)	-	-	-	-	-	-
<b>Female</b>							
Animal No.							
Pinna detachment	( 4 days)	1/1	1/1	1/1	1/1	1/1	1/1
Piliation	( 8 days)	1/1	1/1	1/1	1/1	1/1	1/1
Incisor eruption	(10 days)	1/1	1/1	1/1	1/1	1/1	1/1
	(11 days)	-	-	-	-	-	-
Eyelid separation	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Gait	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Vaginal opening	(42 days)	-	-	-	-	-	-
	(43 days)	-	-	-	-	-	-

Group and dose		300 mg/kg					
Male		743	744	745	746	747	748
Animal No.							
Pinna detachment	( 4 days)	1/1	1/1	1/1	1/1	1/1	1/1
Piliation	( 8 days)	1/1	1/1	1/1	1/1	1/1	1/1
Incisor eruption	(10 days)	1/1	1/1	1/1	1/1	1/1	1/1
	(11 days)	-	-	-	-	-	-
	(12 days)	-	-	-	-	-	-
Eyelid separation	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Gait	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Descensus testis	(21 days)	1/1	1/1	1/1	1/1	1/1	1/1
Cleavage of the balanopreputial gland	(42 days)	0/1	0/1	0/1	0/1	1/1	0/1
	(43 days)	1/1	1/1	0/1	0/1	-	1/1
	(44 days)	-	-	0/1	0/1	-	-
	(45 days)	-	-	1/1	0/1	-	-
	(46 days)	-	-	-	0/1	-	-
	(47 days)	-	-	-	0/1	-	-
	(48 days)	-	-	-	1/1	-	-
	(49 days)	-	-	-	-	-	-
	(50 days)	-	-	-	-	-	-
	(51 days)	-	-	-	-	-	-
	(52 days)	-	-	-	-	-	-
	(53 days)	-	-	-	-	-	-
	(54 days)	-	-	-	-	-	-
Female							
Animal No.		793	794	795	796	797	798
Pinna detachment	( 4 days)	1/1	1/1	1/1	1/1	1/1	1/1
Piliation	( 8 days)	1/1	1/1	1/1	1/1	1/1	1/1
Incisor eruption	(10 days)	1/1	1/1	1/1	1/1	1/1	1/1
	(11 days)	-	-	-	-	-	-
Eyelid separation	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Gait	(15 days)	1/1	1/1	1/1	1/1	1/1	1/1
Vaginal opening	(42 days)	1/1	1/1	1/1	1/1	1/1	1/1
	(43 days)	-	-	-	-	-	-

Appendix 8 Individual function test in F<sub>1</sub> offspring

Study No. 49815

Group and dose		Control					
<b>Male</b>							
Animal No.		701	702	703	704	705	706
Righting reflex	( 5 days)	1/1	1/1	1/1	1/1	1/1	1/1
	( 6 days)	-	-	-	-	-	-
	( 7 days)	-	-	-	-	-	-
Ipsilateral flexor reflex	( 5 days)	1/1	1/1	1/1	1/1	1/1	1/1
Visual placing	(16 days)	1/1	1/1	1/1	1/1	1/1	1/1
Preyer's reflex 500 Hz(60 dB)	(28 days)	-	-	-	-	-	-
Preyer's reflex 20000 Hz(60 dB)	(28 days)	-	-	-	-	-	-
<b>Female</b>							
Animal No.		751	752	753	754	755	756
Righting reflex	( 5 days)	1/1	1/1	1/1	1/1	1/1	1/1
	( 6 days)	-	-	-	-	-	-
	( 7 days)	-	-	-	-	-	-
Ipsilateral flexor reflex	( 5 days)	1/1	1/1	1/1	1/1	1/1	1/1
Visual placing	(16 days)	1/1	1/1	1/1	1/1	1/1	1/1
Preyer's reflex 500 Hz(60 dB)	(28 days)	-	-	-	-	-	-
Preyer's reflex 20000 Hz(60 dB)	(28 days)	-	-	-	-	-	-

Appendix 8 - continued Individual function test in F<sub>1</sub> offspring

Study No. 49815

Group and dose		Control					
<b>Male</b>							
Animal No.		707	708	709	710	711	712
Righting reflex	( 5 days)	1/1	1/1	1/1	0/1	1/1	1/1
	( 6 days)	-	-	-	0/1	-	-
	( 7 days)	-	-	-	1/1	-	-
Ipsilateral flexor reflex	( 5 days)	1/1	1/1	1/1	1/1	1/1	1/1
Visual placing	(16 days)	1/1	1/1	1/1	1/1	-	1/1
Preyer's reflex 500 Hz(60 dB)	(28 days)	1/1	1/1	1/1	1/1	-	1/1
Preyer's reflex 20000 Hz(60 dB)	(28 days)	1/1	1/1	1/1	1/1	-	1/1
<b>Female</b>							
Animal No.		757	758	759	760	761	762
Righting reflex	( 5 days)	1/1	0/1	1/1	1/1	1/1	1/1
	( 6 days)	-	1/1	-	-	-	-
	( 7 days)	-	-	-	-	-	-
Ipsilateral flexor reflex	( 5 days)	1/1	1/1	1/1	1/1	1/1	1/1
Visual placing	(16 days)	1/1	1/1	1/1	1/1	1/1	1/1
Preyer's reflex 500 Hz(60 dB)	(28 days)	1/1	1/1	1/1	1/1	1/1	1/1
Preyer's reflex 20000 Hz(60 dB)	(28 days)	1/1	1/1	1/1	1/1	1/1	1/1

Group and dose		12 mg/kg					
<b>Male</b>							
Animal No.		713	714	715	716	717	718
Righting reflex	( 5 days)	1/1	1/1	1/1	1/1	1/1	0/1
	( 6 days)	-	-	-	-	-	1/1
	( 7 days)	-	-	-	-	-	-
Ipsilateral flexor reflex	( 5 days)	1/1	1/1	1/1	1/1	1/1	1/1
Visual placing	(16 days)	1/1	1/1	1/1	1/1	1/1	1/1
Preyer's reflex 500 Hz(60 dB)	(28 days)	-	-	-	-	-	-
Preyer's reflex 20000 Hz(60 dB)	(28 days)	-	-	-	-	-	-
<b>Female</b>							
Animal No.		763	764	765	766	767	768
Righting reflex	( 5 days)	1/1	1/1	0/1	1/1	1/1	1/1
	( 6 days)	-	-	1/1	-	-	-
	( 7 days)	-	-	-	-	-	-
Ipsilateral flexor reflex	( 5 days)	1/1	1/1	1/1	1/1	1/1	1/1
Visual placing	(16 days)	1/1	1/1	1/1	1/1	1/1	1/1
Preyer's reflex 500 Hz(60 dB)	(28 days)	-	-	-	-	-	-
Preyer's reflex 20000 Hz(60 dB)	(28 days)	-	-	-	-	-	-

Appendix 8 - continued Individual function test in F<sub>1</sub> offspring

Study No. 49815

Group and dose		12 mg/kg					
<b>Male</b>							
Animal No.		719	720	721	722	723	724
Righting reflex	( 5 days)	1/1	0/1	1/1	1/1	1/1	1/1
	( 6 days)	-	1/1	-	-	-	-
	( 7 days)	-	-	-	-	-	-
Ipsilateral flexor reflex	( 5 days)	1/1	1/1	1/1	1/1	1/1	1/1
Visual placing	(16 days)	1/1	1/1	1/1	1/1	1/1	1/1
Preyer's reflex 500 Hz(60 dB)	(28 days)	1/1	1/1	1/1	1/1	1/1	1/1
Preyer's reflex 20000 Hz(60 dB)	(28 days)	1/1	1/1	1/1	1/1	1/1	1/1
<b>Female</b>							
Animal No.		769	770	771	772	773	774
Righting reflex	( 5 days)	1/1	1/1	1/1	1/1	0/1	0/1
	( 6 days)	-	-	-	-	1/1	1/1
	( 7 days)	-	-	-	-	-	-
Ipsilateral flexor reflex	( 5 days)	1/1	1/1	1/1	1/1	1/1	1/1
Visual placing	(16 days)	1/1	1/1	1/1	1/1	1/1	1/1
Preyer's reflex 500 Hz(60 dB)	(28 days)	1/1	1/1	1/1	1/1	1/1	1/1
Preyer's reflex 20000 Hz(60 dB)	(28 days)	1/1	1/1	1/1	1/1	1/1	1/1

Appendix 8 - continued Individual function test in F<sub>1</sub> offspring

Study No. 49815

Group and dose		60 mg/kg					
<b>Male</b>							
Animal No.		725	726	727	728	729	730
Righting reflex	( 5 days)	1/1	1/1	1/1	1/1	0/1	1/1
	( 6 days)	-	-	-	-	1/1	-
	( 7 days)	-	-	-	-	-	-
Ipsilateral flexor reflex	( 5 days)	1/1	1/1	1/1	1/1	1/1	1/1
Visual placing	(16 days)	1/1	1/1	1/1	1/1	1/1	1/1
Preyer's reflex 500 Hz(60 dB)	(28 days)	-	-	-	-	-	-
Preyer's reflex 20000 Hz(60 dB)	(28 days)	-	-	-	-	-	-
<b>Female</b>							
Animal No.		775	776	777	778	779	780
Righting reflex	( 5 days)	1/1	0/1	1/1	0/1	0/1	0/1
	( 6 days)	-	0/1	-	1/1	0/1	1/1
	( 7 days)	-	1/1	-	-	1/1	-
Ipsilateral flexor reflex	( 5 days)	1/1	1/1	1/1	1/1	1/1	1/1
Visual placing	(16 days)	1/1	1/1	1/1	1/1	1/1	1/1
Preyer's reflex 500 Hz(60 dB)	(28 days)	-	-	-	-	-	-
Preyer's reflex 20000 Hz(60 dB)	(28 days)	-	-	-	-	-	-

Appendix 8 - continued Individual function test in F<sub>1</sub> offspring

Study No. 49815

Group and dose		60 mg/kg					
<b>Male</b>							
Animal No.		731	732	733	734	735	736
Righting reflex	( 5 days)	1/1	0/1	1/1	1/1	1/1	1/1
	( 6 days)	-	1/1	-	-	-	-
	( 7 days)	-	-	-	-	-	-
Ipsilateral flexor reflex	( 5 days)	1/1	1/1	1/1	1/1	1/1	1/1
Visual placing	(16 days)	1/1	1/1	1/1	1/1	1/1	1/1
Preyer's reflex 500 Hz(60 dB)	(28 days)	1/1	1/1	1/1	1/1	1/1	1/1
Preyer's reflex 20000 Hz(60 dB)	(28 days)	1/1	1/1	1/1	1/1	1/1	1/1
<b>Female</b>							
Animal No.		781	782	783	784	785	786
Righting reflex	( 5 days)	1/1	0/1	1/1	1/1	1/1	0/1
	( 6 days)	-	0/1	-	-	-	1/1
	( 7 days)	-	1/1	-	-	-	-
Ipsilateral flexor reflex	( 5 days)	1/1	1/1	1/1	1/1	1/1	1/1
Visual placing	(16 days)	1/1	1/1	1/1	1/1	1/1	1/1
Preyer's reflex 500 Hz(60 dB)	(28 days)	1/1	1/1	1/1	1/1	1/1	1/1
Preyer's reflex 20000 Hz(60 dB)	(28 days)	1/1	1/1	1/1	1/1	1/1	1/1

Group and dose		300 mg/kg					
<b>Male</b>							
Animal No.		737	738	739	740	741	742
Righting reflex	( 5 days)	1/1	1/1	1/1	1/1	1/1	1/1
	( 6 days)	-	-	-	-	-	-
	( 7 days)	-	-	-	-	-	-
Ipsilateral flexor reflex	( 5 days)	1/1	1/1	1/1	1/1	1/1	1/1
Visual placing	(16 days)	1/1	1/1	1/1	1/1	1/1	1/1
Preyer's reflex 500 Hz(60 dB)	(28 days)	-	-	-	-	-	-
Preyer's reflex 20000 Hz(60 dB)	(28 days)	-	-	-	-	-	-
<b>Female</b>							
Animal No.		787	788	789	790	791	792
Righting reflex	( 5 days)	1/1	0/1	1/1	1/1	1/1	1/1
	( 6 days)	-	0/1	-	-	-	-
	( 7 days)	-	1/1	-	-	-	-
Ipsilateral flexor reflex	( 5 days)	1/1	1/1	1/1	1/1	1/1	1/1
Visual placing	(16 days)	1/1	1/1	1/1	1/1	1/1	1/1
Preyer's reflex 500 Hz(60 dB)	(28 days)	-	-	-	-	-	-
Preyer's reflex 20000 Hz(60 dB)	(28 days)	-	-	-	-	-	-

Group and dose		300 mg/kg					
<b>Male</b>							
Animal No.		743	744	745	746	747	748
Righting reflex	( 5 days)	1/1	1/1	1/1	1/1	0/1	1/1
	( 6 days)	-	-	-	-	1/1	-
	( 7 days)	-	-	-	-	-	-
Ipsilateral flexor reflex	( 5 days)	1/1	1/1	1/1	1/1	1/1	1/1
Visual placing	(16 days)	1/1	1/1	1/1	1/1	1/1	1/1
Preyer's reflex 500 Hz(60 dB)	(28 days)	1/1	1/1	1/1	1/1	1/1	1/1
Preyer's reflex 20000 Hz(60 dB)	(28 days)	1/1	1/1	1/1	1/1	1/1	1/1
<b>Female</b>							
Animal No.		793	794	795	796	797	798
Righting reflex	( 5 days)	1/1	1/1	1/1	1/1	1/1	1/1
	( 6 days)	-	-	-	-	-	-
	( 7 days)	-	-	-	-	-	-
Ipsilateral flexor reflex	( 5 days)	1/1	1/1	1/1	1/1	1/1	1/1
Visual placing	(16 days)	1/1	1/1	1/1	1/1	1/1	1/1
Preyer's reflex 500 Hz(60 dB)	(28 days)	1/1	1/1	1/1	1/1	1/1	1/1
Preyer's reflex 20000 Hz(60 dB)	(28 days)	1/1	1/1	1/1	1/1	1/1	1/1

## Appendix 9 Individual urinary findings in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Study No. 49815

Group and dose	Animal No.	Urine volume (mL/24hr)	Osmotic pressure (Osm/kg)	Specific gravity
Control	707	19.8	1.622	1.049
	708	17.0	1.321	1.042
	709	19.6	1.210	1.039
	710	39.3	0.769	1.025
	712	52.6	0.607	1.019
12 mg/kg	719	13.3	1.547	1.050
	720	14.2	1.427	1.048
	721	28.9	0.797	1.025
	722	16.8	1.458	1.045
	723	16.2	1.490	1.048
	724	19.8	1.097	1.036
60 mg/kg	731	9.6	1.979	1.070
	732	26.4	0.821	1.028
	733	15.4	1.538	1.056
	734	12.0	1.895	1.066
	735	45.2	0.594	1.020
	736	35.5	0.732	1.025
300 mg/kg	743	23.1	1.051	1.035
	744	30.7	0.889	1.031
	745	21.0	0.931	1.031
	746	9.4	1.781	1.064
	747	23.0	0.825	1.028
	748	22.8	0.931	1.031

## Individual urinary findings in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Color	pH	Protein	Glucose	Ketone body	Bilirubin	Occult blood	Urobilinogen (mg/dL)
Control	707	Y	7.5	±	-	-	-	-	<1
	708	Y	8.0	++	-	-	-	-	<1
	709	Y	7.5	+	-	-	-	-	<1
	710	PY	8.0	±	-	-	-	-	<1
	712	PY	7.5	-	-	-	-	-	<1
12 mg/kg	719	Y	8.0	±	-	-	-	-	<1
	720	Y	8.0	+	-	-	-	+++	<1
	721	PY	8.0	-	-	-	-	+	<1
	722	Y	8.0	+	-	-	-	-	<1
	723	Y	8.0	±	-	-	-	-	<1
	724	Y	7.5	-	-	-	-	-	<1
60 mg/kg	731	Y	8.0	++	-	-	-	+++	<1
	732	PY	7.5	±	-	-	-	-	<1
	733	Y	8.0	+	-	-	-	-	<1
	734	Y	8.0	+	-	-	-	-	<1
	735	PY	7.5	-	-	-	-	-	<1
	736	PY	8.0	+	-	-	-	-	<1
300 mg/kg	743	Y	7.5	-	-	-	-	-	<1
	744	PY	8.0	++	-	-	-	-	<1
	745	PY	7.5	-	-	-	-	-	<1
	746	Y	7.5	±	-	-	-	-	<1
	747	PY	8.0	±	-	-	-	-	<1
	748	PY	7.5	-	-	-	-	-	<1

Abbreviation: PY, pale yellow; Y, yellow.

Grade sign: -, none; ±, trace; +, mild; ++, moderate; +++, marked; +++, very marked.

## Individual urinary findings in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Urinary sediment				
		Epithelial cells	Erythrocytes	Leukocytes	Casts	Crystals
Control	707	-	-	-	-	-
	708	-	-	-	-	+
	709	-	-	-	-	-
	710	-	-	-	-	-
	712	-	-	-	-	-
12 mg/kg	719	-	-	-	-	-
	720	-	-	-	-	-
	721	-	-	-	-	-
	722	-	-	-	-	-
	723	-	-	-	-	-
	724	-	-	-	-	-
60 mg/kg	731	-	-	-	-	-
	732	-	-	-	-	-
	733	-	-	-	-	-
	734	-	-	-	-	+
	735	-	-	-	-	-
	736	-	-	-	-	-
300 mg/kg	743	-	-	-	-	-
	744	-	-	-	-	-
	745	-	-	-	-	-
	746	-	-	-	-	-
	747	-	-	-	-	-
	748	-	-	-	-	-

Grade signs are as follows.

Epithelial cells: -, < 3/field; +, 3/field  $\leq$  and < 10/field; ++, 10/field  $\leq$  and < 20/field; +++,  $\geq$  20/field.

Erythrocytes : -, < 10/field; +, 10/field  $\leq$  and < 30/field; ++, 30/field  $\leq$  and < 100/field; +++, countless.

Leukocytes : -, < 3/field; +, 3/field  $\leq$  and < 20/field; ++, 20/field  $\leq$  and < 40/field; +++,  $\geq$  40/field.

Casts : -, none; +,  $\geq$  1/all field.

Crystals : -, < 10/field; +, 10/field  $\leq$  and < 20/field; ++, 20/field  $\leq$  and < 30/field; +++, countless.

## Appendix 10 Individual urinary findings in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Study No. 49815

Group and dose	Animal No.	Urine volume (mL/24hr)	Osmotic pressure (Osm/kg)	Specific gravity
Control	757	21.3	0.772	1.026
	758	5.3	1.731	1.054
	759	6.1	1.882	1.062
	760	6.5	1.671	1.056
	761	16.8	0.911	1.030
	762	6.5	1.478	1.046
12 mg/kg	769	8.2	1.382	1.044
	770	10.4	1.681	1.056
	771	8.6	1.320	1.044
	772	9.6	1.447	1.048
	773	12.4	1.135	1.040
	774	8.4	1.502	1.052
60 mg/kg	781	8.0	1.107	1.040
	782	11.3	1.520	1.050
	783	6.7	2.010	1.064
	784	13.3	1.022	1.034
	785	5.0	1.933	1.064
	786	4.1	2.895	1.088
300 mg/kg	793	8.1	1.412	1.046
	794	8.8	1.535	1.050
	795	9.3	1.314	1.044
	796	7.0	1.633	1.054
	797	10.2	1.200	1.040
	798	2.2	2.576	1.080

## Appendix 10 - continued

## Individual urinary findings in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Color	pH	Protein	Glucose	Ketone body	Bilirubin	Occult blood	Urobilinogen (mg/dL)
Control	757	PY	7.0	-	-	-	-	-	<1
	758	Y	8.0	-	-	-	-	-	<1
	759	Y	7.0	-	-	-	-	-	<1
	760	Y	8.0	+	-	-	-	-	<1
	761	PY	8.0	-	-	-	-	-	<1
	762	Y	8.0	-	-	-	-	-	<1
12 mg/kg	769	Y	7.5	-	-	-	-	-	<1
	770	Y	6.5	-	-	-	-	-	<1
	771	Y	8.0	±	-	-	-	-	<1
	772	Y	6.5	-	-	-	-	-	<1
	773	Y	7.5	-	-	-	-	-	<1
	774	Y	8.5	+	-	-	-	-	<1
60 mg/kg	781	Y	8.0	-	-	-	-	-	<1
	782	Y	8.0	±	-	-	-	-	<1
	783	Y	7.5	-	-	-	-	-	<1
	784	Y	7.5	-	-	-	-	-	<1
	785	Y	8.5	±	-	-	-	+	<1
	786	Y	6.0	-	-	-	-	-	<1
300 mg/kg	793	Y	6.0	-	-	-	-	-	<1
	794	Y	8.0	-	-	-	-	-	<1
	795	Y	6.5	-	-	-	-	-	<1
	796	Y	8.0	-	-	-	-	-	<1
	797	Y	8.0	-	-	-	-	-	<1
	798	Y	7.5	-	-	-	-	-	<1

Abbreviation: PY, pale yellow; Y, yellow.

Grade sign: -, none; ±, trace; +, mild; ++, moderate; +++, marked; +++, very marked.

Group and dose	Animal No.	Urinary sediment			
		Epithelial cells	Erythrocytes	Leukocytes	Casts
Control	757	-	-	-	-
	758	-	-	-	-
	759	-	-	-	-
	760	-	-	-	-
	761	-	-	-	-
	762	-	-	-	-
12 mg/kg	769	-	-	-	-
	770	-	-	-	-
	771	-	-	-	-
	772	-	-	-	-
	773	-	-	-	-
	774	-	-	-	-
60 mg/kg	781	-	-	-	-
	782	-	-	-	-
	783	-	-	-	-
	784	-	-	-	-
	785	-	-	-	-
	786	-	-	-	-
300 mg/kg	793	-	-	-	-
	794	-	-	-	-
	795	-	-	-	-
	796	-	-	-	-
	797	-	-	-	-
	798	-	-	-	-

Grade signs are as follows.

Epithelial cells: -, < 3/field; +, 3/field  $\leq$  and < 10/field; ++, 10/field  $\leq$  and < 20/field; +++,  $\geq$  20/field.

Erythrocytes : -, < 10/field; +, 10/field  $\leq$  and < 30/field; ++, 30/field  $\leq$  and < 100/field; +++, countless.

Leukocytes : -, < 3/field; +, 3/field  $\leq$  and < 20/field; ++, 20/field  $\leq$  and < 40/field; +++,  $\geq$  40/field.

Casts : -, none; +,  $\geq$  1/all field.

Crystals : -, < 10/field; +, 10/field  $\leq$  and < 20/field; ++, 20/field  $\leq$  and < 30/field; +++, countless.

## Appendix 11 Individual hematological findings in juvenile male rats treated orally with 4-Chlorophenol for 18 days

Group and dose	Animal No.	Leukocytes ( $10^2 / \mu\text{L}$ )	Erythrocytes ( $10^4 / \mu\text{L}$ )	Hemoglobin (g/dL)	Hematocrit (%)	MCV (fL)	MCH (pg)	MCHC (%)	Platelets ( $10^4 / \mu\text{L}$ )
Control	701	65	447	8.3	31.2	70	18.6	26.6	94.8
	702	76	447	8.7	31.0	69	19.5	28.1	105.2
	703	60	491	9.5	34.6	70	19.3	27.5	104.9
	704	80	521	9.9	35.8	69	19.0	27.7	96.2
	705	81	456	8.7	32.2	71	19.1	27.0	111.5
	706	60	403	7.6	28.5	71	18.9	26.7	124.9
12 mg/kg	713	74	460	8.9	31.9	69	19.3	27.9	98.5
	714	51	442	8.9	31.4	71	20.1	28.3	109.4
	715	82	436	8.7	31.2	72	20.0	27.9	111.5
	716	57	469	9.1	32.5	69	19.4	28.0	116.7
	717	99	448	8.2	30.2	67	18.3	27.2	119.5
	718	59	423	7.4	27.3	65	17.5	27.1	109.7
60 mg/kg	725	56	426	7.4	27.6	65	17.4	26.8	125.1
	726	58	443	8.5	30.8	70	19.2	27.6	108.0
	727	83	462	9.2	32.4	70	19.9	28.4	108.9
	728	62	442	8.3	30.3	69	18.8	27.4	99.6
	729	99	433	8.9	31.5	73	20.6	28.3	113.5
	730	57	439	7.8	28.8	66	17.8	27.1	99.5
300 mg/kg	737	58	433	7.7	28.4	66	17.8	27.1	117.7
	738	100	430	8.8	32.0	74	20.5	27.5	111.0
	739	67	449	9.2	32.9	73	20.5	28.0	97.2
	740	61	463	9.5	32.8	71	20.5	29.0	113.7
	741	61	455	8.3	31.6	69	18.2	26.3	116.9
	742	79	436	8.0	29.3	67	18.3	27.3	122.2

## Appendix 11 - continued

## Individual hematological findings in juvenile male rats treated orally with 4-Chlorophenol for 18 days

Group and dose	Animal No.	Differential leukocyte count					
		Eosinophil (%)	Stab neutrophil (%)	Segmented neutrophil (%)	Lymphocyte (%)	Basophil (%)	Monocyte (%)
Control	701	1.0	0.0	10.0	88.0	0.0	1.0
	702	0.0	2.0	8.0	89.0	0.0	1.0
	703	0.0	1.0	11.0	84.0	0.0	4.0
	704	0.0	0.0	18.0	78.0	0.0	4.0
	705	1.0	0.0	13.0	84.0	0.0	2.0
	706	0.0	1.0	12.0	85.0	0.0	2.0
12 mg/kg	713	0.0	0.0	14.0	83.0	0.0	3.0
	714	2.0	0.0	14.0	82.0	0.0	2.0
	715	0.0	0.0	17.0	81.0	0.0	2.0
	716	0.0	0.0	17.0	77.0	0.0	6.0
	717	0.0	1.0	14.0	82.0	0.0	3.0
	718	2.0	0.0	7.0	88.0	0.0	3.0
60 mg/kg	725	0.0	0.0	23.0	72.0	0.0	5.0
	726	0.0	0.0	13.0	83.0	0.0	4.0
	727	0.0	0.0	11.0	86.0	0.0	3.0
	728	0.0	1.0	14.0	82.0	0.0	3.0
	729	0.0	1.0	18.0	77.0	0.0	4.0
	730	0.0	0.0	7.0	91.0	0.0	2.0
300 mg/kg	737	1.0	1.0	17.0	81.0	0.0	0.0
	738	0.0	0.0	15.0	82.0	0.0	3.0
	739	0.0	0.0	21.0	76.0	0.0	3.0
	740	0.0	0.0	13.0	85.0	0.0	2.0
	741	0.0	2.0	8.0	85.0	0.0	5.0
	742	0.0	1.0	9.0	86.0	0.0	4.0

## Appendix 12 Individual hematological findings in juvenile female rats treated orally with 4-Chlorophenol for 18 days

Group and dose	Animal No.	Leukocytes ( $10^2 / \mu\text{L}$ )	Erythrocytes ( $10^4 / \mu\text{L}$ )	Hemoglobin (g/dL)	Hematocrit (%)	MCV (fL)	MCH (pg)	MCHC (%)	Platelets ( $10^4 / \mu\text{L}$ )
Control	751	88	457	8.4	30.5	67	18.4	27.5	120.2
	752	93	425	9.1	32.4	76	21.4	28.1	114.0
	753	83	492	8.9	32.8	67	18.1	27.1	127.0
	754	65	489	9.4	34.0	70	19.2	27.6	108.7
	755	77	435	8.5	30.8	71	19.5	27.6	105.9
	756	101	448	8.2	30.3	68	18.3	27.1	116.7
12 mg/kg	763	66	434	9.0	32.4	75	20.7	27.8	93.4
	764	75	437	8.6	31.3	72	19.7	27.5	117.2
	765	41	435	8.3	29.4	68	19.1	28.2	117.2
	766	76	462	9.0	33.7	73	19.5	26.7	108.1
	767	58	427	8.4	30.3	71	19.7	27.7	118.7
	768	60	433	8.0	30.4	70	18.5	26.3	110.9
60 mg/kg	775	81	464	8.2	31.4	68	17.7	26.1	111.6
	776	79	476	9.7	34.1	72	20.4	28.4	108.5
	777	63	429	8.5	30.4	71	19.8	28.0	103.5
	778	66	447	9.1	32.7	73	20.4	27.8	94.0
	779	74	490	9.7	34.6	71	19.8	28.0	102.1
	780	85	485	8.0	30.7	63	16.5	26.1	118.4
300 mg/kg	787	61	458	9.4	33.6	73	20.5	28.0	109.5
	788	73	439	8.9	30.7	70	20.3	29.0	117.0
	789	76	457	9.4	33.7	74	20.6	27.9	123.4
	790	69	434	9.0	31.7	73	20.7	28.4	95.4
	791	108	463	8.8	32.6	70	19.0	27.0	109.3
	792	66	483	8.3	32.0	66	17.2	25.9	94.9

Group and dose	Animal No.	Differential leukocyte count					
		Eosinophil (%)	Stab neutrophil (%)	Segmented neutrophil (%)	Lymphocyte (%)	Basophil (%)	Monocyte (%)
Control	751	0.0	1.0	15.0	81.0	0.0	3.0
	752	0.0	0.0	19.0	79.0	0.0	2.0
	753	1.0	0.0	17.0	81.0	0.0	1.0
	754	0.0	1.0	11.0	84.0	0.0	4.0
	755	0.0	0.0	22.0	76.0	0.0	2.0
	756	0.0	0.0	20.0	79.0	0.0	1.0
12 mg/kg	763	1.0	2.0	8.0	86.0	0.0	3.0
	764	1.0	0.0	13.0	84.0	0.0	2.0
	765	1.0	2.0	20.0	75.0	0.0	2.0
	766	0.0	0.0	14.0	83.0	0.0	3.0
	767	0.0	0.0	22.0	77.0	0.0	1.0
	768	0.0	0.0	18.0	78.0	0.0	4.0
60 mg/kg	775	1.0	0.0	14.0	85.0	0.0	0.0
	776	0.0	1.0	6.0	92.0	0.0	1.0
	777	0.0	0.0	16.0	79.0	0.0	5.0
	778	1.0	2.0	14.0	83.0	0.0	0.0
	779	1.0	0.0	15.0	83.0	0.0	1.0
	780	0.0	0.0	11.0	85.0	0.0	4.0
300 mg/kg	787	0.0	2.0	7.0	88.0	0.0	3.0
	788	0.0	0.0	22.0	76.0	0.0	2.0
	789	1.0	1.0	15.0	80.0	0.0	3.0
	790	0.0	0.0	21.0	78.0	0.0	1.0
	791	0.0	0.0	19.0	78.0	0.0	3.0
	792	0.0	0.0	11.0	89.0	0.0	0.0

## Appendix 13 Individual hematological findings in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Leukocytes ( $10^2 / \mu\text{L}$ )	Erythrocytes ( $10^4 / \mu\text{L}$ )	Hemoglobin (g/dL)	Hematocrit (%)	MCV (fL)	MCH (pg)	MCHC (%)	Platelets ( $10^4 / \mu\text{L}$ )	PT (sec)	APTT (sec)
Control	707	89	902	15.3	48.6	54	17.0	31.5	114.5	13.5	24.9
	708	80	861	14.6	46.8	54	17.0	31.2	94.0	14.9	24.0
	709	71	839	15.2	48.1	57	18.1	31.6	92.4	13.4	22.5
	710	99	861	16.3	49.9	58	18.9	32.7	100.3	12.7	19.2
	712	122	880	15.7	49.6	56	17.8	31.7	93.3	13.5	17.1
12 mg/kg	719	84	863	15.9	49.6	57	18.4	32.1	94.6	17.8	28.0
	720	161	751	14.0	43.8	58	18.6	32.0	118.6	11.9	14.4
	721	107	892	15.5	50.7	57	17.4	30.6	86.3	15.8	25.4
	722	113	853	15.0	47.3	55	17.6	31.7	96.5	17.6	27.9
	723	112	880	15.5	50.4	57	17.6	30.8	71.9	16.3	23.3
	724	87	841	15.3	48.3	57	18.2	31.7	92.9	16.6	25.4
60 mg/kg	731	107	861	15.2	49.1	57	17.7	31.0	101.5	14.0	22.9
	732	86	877	16.1	52.3	60	18.4	30.8	93.0	16.9	25.6
	733	68	885	16.0	51.9	59	18.1	30.8	81.7	15.5	26.5
	734	110	864	15.6	48.8	56	18.1	32.0	116.5	15.4	23.6
	735	91	893	15.8	49.6	56	17.7	31.9	99.9	14.7	25.0
	736	79	891	15.9	50.9	57	17.8	31.2	95.4	18.2	30.6
300 mg/kg	743	121	846	14.9	48.2	57	17.6	30.9	109.1	16.2	21.7
	744	103	837	14.7	46.8	56	17.6	31.4	96.0	15.4	24.5
	745	95	779	15.0	46.6	60	19.3	32.2	107.7	14.4	24.3
	746	51	851	15.1	50.0	59	17.7	30.2	88.4	16.2	31.3
	747	83	866	16.0	50.8	59	18.5	31.5	84.9	13.8	26.0
	748	83	813	15.4	47.7	59	18.9	32.3	105.9	14.1	27.5

## Appendix 13 - continued

Individual hematological findings in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Differential leukocyte count					
		Eosinophil (%)	Stab neutrophil (%)	Segmented neutrophil (%)	Lymphocyte (%)	Basophil (%)	Monocyte (%)
Control	707	2.0	0.0	16.0	79.0	0.0	3.0
	708	1.0	0.0	14.0	84.0	0.0	1.0
	709	0.0	0.0	6.0	93.0	0.0	1.0
	710	1.0	0.0	12.0	87.0	0.0	0.0
	712	3.0	0.0	22.0	73.0	0.0	2.0
12 mg/kg	719	0.0	0.0	15.0	84.0	0.0	1.0
	720	1.0	0.0	24.0	75.0	0.0	0.0
	721	1.0	0.0	9.0	89.0	0.0	1.0
	722	0.0	0.0	10.0	89.0	0.0	1.0
	723	2.0	0.0	12.0	86.0	0.0	0.0
	724	2.0	0.0	13.0	82.0	0.0	3.0
60 mg/kg	731	0.0	0.0	7.0	90.0	0.0	3.0
	732	0.0	0.0	7.0	91.0	0.0	2.0
	733	1.0	0.0	7.0	92.0	0.0	0.0
	734	1.0	0.0	12.0	84.0	0.0	3.0
	735	1.0	0.0	18.0	78.0	0.0	3.0
	736	0.0	0.0	12.0	88.0	0.0	0.0
300 mg/kg	743	0.0	0.0	4.0	96.0	0.0	0.0
	744	3.0	0.0	24.0	72.0	0.0	1.0
	745	1.0	0.0	2.0	96.0	0.0	1.0
	746	2.0	0.0	19.0	77.0	0.0	2.0
	747	1.0	0.0	9.0	89.0	0.0	1.0
	748	1.0	0.0	13.0	85.0	0.0	1.0

## Appendix 14 Individual hematological findings in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Study No. 49815

Group and dose	Animal No.	Leukocytes ( $10^2 / \mu\text{L}$ )	Erythrocytes ( $10^4 / \mu\text{L}$ )	Hemoglobin (g/dL)	Hematocrit (%)	MCV (fL)	MCH (pg)	MCHC (%)	Platelets ( $10^4 / \mu\text{L}$ )	PT (sec)	APTT (sec)
Control	757	41	884	15.7	48.5	55	17.8	32.4	92.9	10.0	15.7
	758	58	780	15.0	46.6	60	19.2	32.2	103.8	10.1	27.8
	759	46	795	14.9	45.8	58	18.7	32.5	121.1	11.2	14.9
	760	60	774	14.0	45.4	59	18.1	30.8	89.8	10.9	21.2
	761	51	815	15.1	43.4	53	18.5	34.8	80.4	11.0	14.3
	762	50	764	14.2	42.1	55	18.6	33.7	75.1	12.5	17.8
12 mg/kg	769	100	770	14.9	46.3	60	19.4	32.2	91.9	11.1	22.2
	770	48	771	14.1	44.8	58	18.3	31.5	97.9	9.9	20.2
	771	69	795	15.5	44.6	56	19.5	34.8	88.9	11.2	19.2
	772	62	803	14.2	40.4	50	17.7	35.1	73.5	10.3	20.1
	773	49	838	15.1	47.5	57	18.0	31.8	106.5	11.2	18.9
	774	42	830	15.0	46.6	56	18.1	32.2	92.2	11.3	17.3
60 mg/kg	781	57	783	14.2	44.5	57	18.1	31.9	92.1	11.3	19.5
	782	38	814	14.2	44.6	55	17.4	31.8	92.9	10.9	19.8
	783	52	778	14.1	44.4	57	18.1	31.8	82.6	10.7	16.7
	784	65	817	15.3	46.6	57	18.7	32.8	114.0	12.2	18.9
	785	49	861	14.3	44.9	52	16.6	31.8	107.6	11.7	20.1
	786	50	814	14.3	44.7	55	17.6	32.0	96.2	10.3	19.2
300 mg/kg	793	62	759	14.4	44.5	59	19.0	32.4	99.2	10.4	19.8
	794	33	808	14.5	45.2	56	17.9	32.1	90.3	10.0	16.9
	795	47	742	13.9	45.4	61	18.7	30.6	97.5	11.2	19.0
	796	57	804	14.7	45.6	57	18.3	32.2	97.7	11.3	19.0
	797	57	770	14.4	45.9	60	18.7	31.4	94.0	10.5	18.5
	798	64	774	13.1	42.1	54	16.9	31.1	93.3	10.8	18.2

## Appendix 14 - continued

Individual hematological findings in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Differential leukocyte count					
		Eosinophil (%)	Stab neutrophil (%)	Segmented neutrophil (%)	Lymphocyte (%)	Basophil (%)	Monocyte (%)
Control	757	1.0	0.0	11.0	85.0	0.0	3.0
	758	0.0	0.0	10.0	90.0	0.0	0.0
	759	1.0	0.0	11.0	86.0	0.0	2.0
	760	2.0	0.0	18.0	79.0	0.0	1.0
	761	0.0	0.0	3.0	97.0	0.0	0.0
	762	0.0	0.0	9.0	89.0	0.0	2.0
12 mg/kg	769	1.0	0.0	7.0	92.0	0.0	0.0
	770	1.0	0.0	27.0	71.0	0.0	1.0
	771	1.0	0.0	8.0	90.0	0.0	1.0
	772	1.0	0.0	23.0	74.0	0.0	2.0
	773	3.0	0.0	23.0	72.0	0.0	2.0
	774	0.0	0.0	19.0	80.0	0.0	1.0
60 mg/kg	781	1.0	0.0	22.0	74.0	0.0	3.0
	782	0.0	0.0	14.0	85.0	0.0	1.0
	783	0.0	0.0	9.0	91.0	0.0	0.0
	784	0.0	0.0	23.0	77.0	0.0	0.0
	785	3.0	0.0	23.0	72.0	0.0	2.0
	786	1.0	0.0	10.0	86.0	0.0	3.0
300 mg/kg	793	0.0	0.0	12.0	88.0	0.0	0.0
	794	0.0	0.0	18.0	81.0	0.0	1.0
	795	1.0	0.0	9.0	90.0	0.0	0.0
	796	3.0	0.0	18.0	75.0	0.0	4.0
	797	1.0	0.0	20.0	79.0	0.0	0.0
	798	0.0	0.0	6.0	94.0	0.0	0.0

## Appendix 15 Individual biochemical findings in juvenile male rats treated orally with 4-Chlorophenol for 18 days

Group and dose	Animal No.	T. Protein (g/dL)	Albumin (g/dL)	A/G ratio	T. Bilirubin (mg/dL)	GOT (IU/L)	GPT (IU/L)	$\gamma$ -GTP (IU/L)	ALP (IU/L)	Cholinesterase (IU/L)	Acetylcholinesterase ( $\Delta$ pH)
Control	701	4.0	3.1	3.44	0.0	244	38	0.5	1370	72	0.09
	702	4.0	3.2	4.00	0.1	93	20	0.6	743	86	0.09
	703	4.3	3.2	2.91	0.0	94	22	0.1	800	126	0.12
	704	3.7	2.9	3.62	0.1	100	33	0.4	951	83	0.08
	705	4.3	3.3	3.30	0.0	140	27	0.0	1000	87	0.08
	706	4.1	3.2	3.56	0.0	99	22	0.8	867	77	0.08
12 mg/kg	713	4.1	3.3	4.13	0.0	90	23	0.2	1028	100	0.09
	714	4.5	3.4	3.09	0.0	91	22	0.5	681	63	0.07
	715	4.2	3.1	2.82	0.0	114	26	0.5	913	78	0.09
	716	4.0	3.0	3.00	0.0	108	22	0.0	988	86	0.08
	717	4.2	3.1	2.82	0.0	107	30	0.3	1051	63	0.07
	718	4.3	3.3	3.30	0.0	92	23	0.3	880	73	0.07
60 mg/kg	725	4.2	3.2	3.20	0.0	106	21	0.4	815	61	0.07
	726	4.5	3.4	3.09	0.0	86	17	0.1	727	86	0.08
	727	4.2	3.3	3.67	0.0	93	20	0.0	905	75	0.08
	728	3.7	2.8	3.11	0.0	111	33	0.1	833	79	0.07
	729	4.1	3.3	4.13	0.1	272	34	0.2	932	80	0.09
	730	4.2	3.2	3.20	0.0	91	23	0.1	1140	77	0.07
300 mg/kg	737	4.2	3.3	3.67	0.0	95	21	0.0	728	82	0.08
	738	4.5	3.5	3.50	0.0	119	29	0.0	750	75	0.07
	739	4.4	3.5	3.89	0.0	92	25	0.0	734	79	0.09
	740	3.8	3.1	4.43	0.1	96	20	0.0	1051	63	0.08
	741	4.4	3.3	3.00	0.0	92	21	0.4	853	79	0.08
	742	4.3	3.3	3.30	0.1	90	22	0.4	839	75	0.08

Group and dose	Animal No.	T. Cholesterol (mg/dL)	Triglycerides (mg/dL)	Phospholipids (mg/dL)	Glucose (mg/dL)	BUN (mg/dL)	Creatinine (mg/dL)	IP (mg/dL)	Ca (mg/dL)	Na (mEq/L)	K (mEq/L)
Control	701	102	38	196	143	14.9	0.3	11.6	11.0	142.6	5.58
	702	100	36	195	166	10.0	0.3	10.7	11.1	143.4	4.72
	703	100	233	227	166	16.3	0.3	10.1	11.4	143.1	5.29
	704	92	55	158	135	20.0	0.4	10.5	11.4	144.3	4.98
	705	105	282	240	153	18.6	0.4	10.8	12.0	144.7	4.95
	706	98	130	213	179	17.0	0.3	10.7	11.5	142.5	4.82
12 mg/kg	713	99	90	192	148	14.5	0.3	10.9	11.8	143.0	4.79
	714	108	132	226	153	17.1	0.4	10.5	11.5	143.3	4.59
	715	108	156	238	153	17.5	0.4	11.5	12.0	143.1	5.49
	716	83	46	148	150	15.2	0.4	10.3	11.1	144.1	5.20
	717	110	191	235	172	15.2	0.3	11.0	11.4	143.7	5.02
	718	101	164	213	167	16.4	0.3	10.6	11.3	142.4	4.94
60 mg/kg	725	90	84	182	144	14.1	0.3	10.8	11.2	142.8	5.05
	726	118	90	238	146	15.8	0.3	9.7	11.2	142.9	4.69
	727	79	137	175	149	13.6	0.3	10.8	11.1	142.9	5.48
	728	70	76	144	136	18.5	0.4	10.5	11.0	145.1	4.96
	729	87	75	184	177	15.1	0.3	11.8	11.4	144.6	5.15
	730	117	124	221	144	11.9	0.3	11.5	11.2	142.2	6.32
300 mg/kg	737	87	65	175	133	15.8	0.3	11.0	11.6	141.7	5.78
	738	93	129	227	154	20.5	0.3	10.6	11.8	143.2	4.77
	739	90	106	184	154	14.4	0.3	9.8	11.4	143.6	4.58
	740	76	42	148	141	17.1	0.3	10.7	11.1	145.3	5.18
	741	94	153	214	154	15.1	0.4	10.3	11.5	145.1	4.84
	742	98	123	204	170	13.4	0.3	10.7	11.9	146.6	4.39

Group and dose	Animal No.	Cl (mEq/L)
Control	701	106.5
	702	105.1
	703	106.5
	704	106.5
	705	105.6
	706	103.6
12 mg/kg	713	104.0
	714	106.5
	715	107.7
	716	109.4
	717	106.9
	718	105.4
60 mg/kg	725	107.3
	726	105.3
	727	106.4
	728	109.9
	729	107.0
	730	103.4
300 mg/kg	737	104.2
	738	104.5
	739	104.5
	740	108.7
	741	106.0
	742	104.0

## Appendix 16 Individual biochemical findings in juvenile female rats treated orally with 4-Chlorophenol for 18 days

Group and dose	Animal No.	T.Protein (g/dL)	Albumin (g/dL)	A/G ratio	T.Bilirubin (mg/dL)	GOT (IU/L)	GPT (IU/L)	$\gamma$ -GTP (IU/L)	ALP (IU/L)	Cholinesterase (IU/L)	Acetylcholinesterase ( $\Delta$ pH)
Control	751	4.1	3.1	3.10	0.0	118	23	0.0	830	104	0.09
	752	4.5	3.3	2.75	0.0	139	23	0.0	753	94	0.09
	753	4.4	3.5	3.89	0.1	92	19	0.0	648	96	0.09
	754	3.9	2.9	2.90	0.1	161	31	0.1	1376	79	0.08
	755	4.0	3.1	3.44	0.0	210	35	0.0	1020	75	0.08
	756	4.3	3.4	3.78	0.0	95	25	0.5	865	96	0.10
12 mg/kg	763	4.2	3.4	4.25	0.0	124	26	0.1	727	89	0.07
	764	4.3	3.2	2.91	0.0	114	27	0.4	539	97	0.09
	765	4.1	3.2	3.56	0.0	89	20	0.0	690	91	0.08
	766	3.8	2.9	3.22	0.0	104	24	0.0	1025	71	0.07
	767	4.1	3.1	3.10	0.0	104	22	0.0	773	90	0.10
	768	4.2	3.3	3.67	0.0	137	27	0.4	861	78	0.08
60 mg/kg	775	4.2	3.2	3.20	0.0	117	25	0.0	783	69	0.07
	776	4.4	3.4	3.40	0.0	93	18	0.5	751	78	0.09
	777	4.0	3.1	3.44	0.0	84	24	0.4	768	72	0.08
	778	3.8	3.0	3.75	0.0	163	31	0.3	918	69	0.07
	779	4.1	3.1	3.10	0.0	212	27	0.0	934	74	0.08
	780	4.3	3.2	2.91	0.0	123	22	0.1	841	79	0.07
300 mg/kg	787	4.4	3.5	3.89	0.0	133	25	0.0	774	79	0.08
	788	4.6	3.5	3.18	0.0	101	21	0.4	610	94	0.09
	789	4.3	3.3	3.30	0.0	97	23	0.0	863	100	0.09
	790	3.7	3.0	4.29	0.0	98	22	1.0	965	74	0.07
	791	4.2	3.4	4.25	0.0	111	19	0.0	873	78	0.09
	792	4.4	3.4	3.40	0.1	87	19	0.0	673	86	0.08

Group and dose	Animal No.	T. Cholesterol (mg/dL)	Triglycerides (mg/dL)	Phospholipids (mg/dL)	Glucose (mg/dL)	BUN (mg/dL)	Creatinine (mg/dL)	IP (mg/dL)	Ca (mg/dL)	Na (mEq/L)	K (mEq/L)
Control	751	102	96	207	152	12.9	0.3	9.6	10.9	143.9	4.66
	752	123	108	256	166	17.9	0.3	9.5	11.0	141.1	4.55
	753	113	101	218	161	15.1	0.4	11.0	11.5	143.1	4.84
	754	80	54	160	141	15.4	0.4	10.1	11.3	144.6	5.27
	755	99	60	191	152	16.1	0.4	10.7	10.8	142.8	5.27
	756	96	111	204	146	17.2	0.3	10.3	11.2	143.8	4.59
12 mg/kg	763	100	75	204	181	14.8	0.4	9.7	11.4	142.8	4.45
	764	122	77	246	156	16.7	0.3	9.5	11.4	142.7	4.49
	765	105	82	221	149	12.7	0.3	9.8	10.8	143.5	4.49
	766	72	70	147	128	18.1	0.3	10.1	11.2	145.9	4.47
	767	79	65	170	154	15.0	0.3	10.1	10.8	142.7	5.25
	768	105	95	211	161	17.4	0.3	10.2	11.0	144.8	4.95
60 mg/kg	775	97	91	190	148	14.1	0.3	9.9	11.1	143.5	4.69
	776	114	69	223	155	13.8	0.3	9.3	10.6	142.1	4.86
	777	102	102	206	143	15.7	0.4	10.3	11.3	143.0	4.50
	778	79	98	167	156	17.0	0.3	10.9	11.6	145.2	5.16
	779	89	68	177	175	16.1	0.3	10.1	10.5	143.6	5.16
	780	118	122	224	151	13.7	0.4	10.6	11.1	143.6	4.65
300 mg/kg	787	100	67	195	160	14.2	0.4	9.4	10.8	142.3	4.45
	788	112	101	226	156	14.0	0.3	9.5	10.9	142.3	4.59
	789	103	105	209	160	16.1	0.3	9.5	11.1	144.0	4.73
	790	75	61	158	131	19.0	0.4	10.8	10.8	145.0	5.48
	791	99	24	181	147	13.1	0.4	9.5	11.1	143.6	4.81
	792	104	49	207	154	14.4	0.3	9.8	11.0	144.5	4.73

Group and dose	Animal No.	Cl (mEq/L)
Control	751	105.9
	752	105.8
	753	104.8
	754	109.6
	755	104.3
	756	104.9
12 mg/kg	763	106.6
	764	105.7
	765	106.8
	766	109.5
	767	108.9
	768	106.5
60 mg/kg	775	105.3
	776	106.8
	777	105.6
	778	106.6
	779	109.4
	780	104.8
300 mg/kg	787	106.7
	788	105.6
	789	105.8
	790	110.3
	791	107.6
	792	106.6

## Appendix 17 Individual biochemical findings in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Study No. 49815

Group and dose	Animal No.	T. Protein (g/dL)	Albumin (g/dL)	A/G ratio	T. Bilirubin (mg/dL)	GOT (IU/L)	GPT (IU/L)	$\gamma$ -GTP (IU/L)	ALP (IU/L)	Cholinesterase (IU/L)	Acetylcholinesterase ( $\Delta$ pH)
Control	707	5.8	3.9	2.05	0.1	101	26	0.0	193	56	0.05
	708	5.4	3.7	2.18	0.0	74	22	0.0	243	102	0.07
	709	5.3	3.7	2.31	0.0	95	19	0.0	302	104	0.07
	710	5.2	3.5	2.06	0.0	90	15	0.0	217	132	0.12
	712	5.8	3.9	2.05	0.0	96	22	0.0	229	93	0.09
12 mg/kg	719	4.9	3.4	2.27	0.0	80	22	0.0	234	53	0.05
	720	5.0	3.3	1.94	0.0	67	14	0.0	191	55	0.05
	721	5.4	3.8	2.37	0.0	75	19	0.0	194	68	0.05
	722	5.4	3.7	2.18	0.0	81	24	0.0	223	61	0.05
	723	5.5	3.8	2.24	0.0	78	17	0.0	187	70	0.06
	724	5.5	3.9	2.44	0.0	91	37	0.0	226	62	0.05
60 mg/kg	731	5.6	3.6	1.80	0.0	90	17	0.0	263	64	0.06
	732	5.6	3.9	2.29	0.0	82	19	0.1	198	69	0.05
	733	5.3	3.6	2.12	0.0	86	16	0.5	241	72	0.06
	734	5.5	3.7	2.06	0.0	67	24	0.0	163	64	0.05
	735	5.7	3.9	2.17	0.0	87	23	0.0	181	58	0.05
	736	5.7	3.9	2.17	0.1	91	22	0.0	210	54	0.05
300 mg/kg	743	5.4	3.8	2.37	0.0	94	20	0.0	271	49	0.03
	744	5.2	3.6	2.25	0.0	77	21	0.0	163	74	0.06
	745	5.6	3.7	1.95	0.0	89	20	0.1	212	63	0.05
	746	5.1	3.6	2.40	0.0	75	24	0.1	178	33	0.02
	747	5.5	3.7	2.06	0.0	97	22	0.0	253	72	0.06
	748	5.2	3.5	2.06	0.0	93	17	0.0	216	54	0.05

## Appendix 17 - continued

## Individual biochemical findings in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	T. Cholesterol (mg/dL)	Triglycerides (mg/dL)	Phospholipids (mg/dL)	Glucose (mg/dL)	BUN (mg/dL)	Creatinine (mg/dL)	IP (mg/dL)	Ca (mg/dL)	Na (mEq/L)	K (mEq/L)
Control	707	56	111	113	127	14.0	0.4	7.7	9.9	146.2	4.47
	708	53	62	100	136	15.2	0.5	7.5	9.6	146.9	4.05
	709	67	30	107	142	15.8	0.5	7.3	9.8	146.5	4.29
	710	70	45	113	154	18.0	0.5	7.4	10.0	144.8	4.17
	712	53	50	97	152	14.6	0.5	7.2	9.8	146.7	4.30
12 mg/kg	719	40	46	80	124	18.9	0.4	7.2	9.4	145.2	3.87
	720	48	50	92	127	14.5	0.4	6.5	8.5	144.4	4.35
	721	53	86	107	140	14.7	0.4	6.6	9.8	147.7	4.26
	722	51	54	94	120	14.4	0.4	6.9	9.9	147.2	4.18
	723	63	79	115	138	15.7	0.4	7.2	10.1	147.1	4.43
	724	50	70	95	132	17.0	0.4	7.4	9.9	146.0	4.15
60 mg/kg	731	51	64	102	150	15.4	0.5	7.2	9.8	145.4	4.18
	732	55	73	102	163	15.1	0.5	6.8	9.9	145.8	4.55
	733	57	79	107	125	13.9	0.4	6.4	9.5	147.5	4.12
	734	50	46	94	135	14.8	0.4	6.9	9.9	147.4	4.24
	735	59	64	109	136	16.7	0.4	6.1	9.3	146.9	4.23
	736	41	48	80	113	14.8	0.4	7.0	10.1	147.5	4.18
300 mg/kg	743	54	70	108	173	14.1	0.6	7.2	9.5	145.9	4.25
	744	64	117	119	131	13.7	0.4	7.4	9.8	146.6	3.98
	745	53	41	97	123	16.9	0.6	7.0	9.3	147.0	4.25
	746	50	55	97	121	14.3	0.4	6.5	8.8	145.8	4.24
	747	49	52	96	135	15.3	0.4	7.1	9.6	145.7	4.27
	748	57	40	99	106	14.2	0.4	6.7	9.1	145.6	4.28

## Individual biochemical findings in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Cl (mEq/L)
Control	707	102.4
	708	103.6
	709	103.1
	710	102.3
	712	103.8
12 mg/kg	719	105.7
	720	105.4
	721	106.4
	722	105.4
	723	106.9
	724	103.4
60 mg/kg	731	104.4
	732	102.8
	733	106.3
	734	104.7
	735	104.5
	736	104.1
300 mg/kg	743	105.8
	744	102.7
	745	104.2
	746	105.4
	747	105.7
	748	105.3

## Appendix 18 Individual biochemical findings in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Study No.49815

Group and dose	Animal No.	T. Protein (g/dL)	Albumin (g/dL)	A/G ratio	T. Bilirubin (mg/dL)	GOT (IU/L)	GPT (IU/L)	$\gamma$ -GTP (IU/L)	ALP (IU/L)	Cholinesterase (IU/L)	Acetylcholinesterase ( $\Delta$ pH)
Control	757	5.7	4.1	2.56	0.0	87	17	0.1	95	286	0.26
	758	5.3	3.9	2.79	0.0	86	16	0.3	139	324	0.29
	759	6.2	3.8	1.58	0.0	93	23	0.7	214	534	0.52
	760	5.9	4.2	2.47	0.0	82	12	0.5	140	416	0.38
	761	6.1	4.5	2.81	0.0	79	15	0.6	120	426	0.37
	762	5.8	4.4	3.14	0.0	78	15	0.3	126	764	0.69
12 mg/kg	769	5.4	4.0	2.86	0.0	88	20	0.0	124	515	0.46
	770	5.6	3.9	2.29	0.0	74	13	0.4	131	453	0.44
	771	5.6	4.2	3.00	0.1	70	13	0.1	110	423	0.40
	772	6.3	4.6	2.71	0.1	71	17	0.3	82	459	0.39
	773	6.5	4.8	2.82	0.1	95	14	0.1	99	858	0.79
	774	5.2	3.6	2.25	0.0	90	17	0.8	151	430	0.41
60 mg/kg	781	5.6	4.0	2.50	0.0	75	14	0.6	119	526	0.48
	782	6.1	4.7	3.36	0.1	65	15	0.3	99	535	0.49
	783	5.5	3.9	2.44	0.0	75	19	0.4	149	416	0.39
	784	5.9	4.4	2.93	0.0	96	20	0.9	109	359	0.33
	785	5.9	4.1	2.28	0.0	92	17	0.1	113	380	0.34
	786	6.5	4.9	3.06	0.1	81	15	0.0	83	721	0.64
300 mg/kg	793	5.7	4.2	2.80	0.1	90	14	0.2	155	510	0.46
	794	5.9	4.5	3.21	0.1	63	16	0.3	133	608	0.54
	795	6.2	4.7	3.13	0.0	93	20	0.0	86	516	0.46
	796	5.8	4.0	2.22	0.0	96	24	0.6	117	739	0.70
	797	5.9	4.2	2.47	0.1	102	13	0.7	120	392	0.34
	798	5.7	4.3	3.07	0.1	89	19	0.4	120	691	0.62

## Appendix 18 - continued

## Individual biochemical findings in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	T. Cholesterol (mg/dL)	Triglycerides (mg/dL)	Phospholipids (mg/dL)	Glucose (mg/dL)	BUN (mg/dL)	Creatinine (mg/dL)	IP (mg/dL)	Ca (mg/dL)	Na (mEq/L)	K (mEq/L)
Control	757	73	20	138	115	17.0	0.4	5.7	9.4	146.7	3.91
	758	47	13	102	88	19.7	0.5	7.4	9.6	145.3	4.61
	759	65	15	124	57	22.3	0.6	8.4	10.2	146.3	7.32
	760	51	31	121	109	19.7	0.5	5.2	9.4	144.7	3.79
	761	61	16	121	110	20.8	0.5	7.2	10.2	147.8	4.08
	762	54	17	113	97	15.1	0.4	7.1	10.0	146.6	4.11
12 mg/kg	769	47	17	101	90	19.3	0.5	6.6	9.4	144.5	4.60
	770	74	32	141	102	13.3	0.4	4.9	9.2	145.1	3.66
	771	64	22	132	112	21.2	0.6	7.4	10.0	146.7	4.39
	772	76	23	153	108	20.2	0.4	7.7	10.0	144.4	4.30
	773	72	18	152	92	17.4	0.5	6.4	10.0	146.6	4.03
	774	73	13	133	88	21.2	0.5	7.8	9.4	146.6	4.30
60 mg/kg	781	66	44	123	106	16.4	0.5	6.7	9.5	144.6	4.35
	782	84	48	171	121	18.4	0.4	5.6	10.0	144.9	3.98
	783	61	20	119	112	16.4	0.4	6.1	9.5	145.9	3.56
	784	67	17	131	91	17.7	0.5	6.4	9.7	144.9	4.36
	785	50	13	113	115	19.0	0.5	7.9	9.8	145.8	4.24
	786	59	13	139	129	18.7	0.5	6.1	10.0	146.1	3.53
300 mg/kg	793	70	59	142	104	18.5	0.5	6.6	9.8	146.1	4.14
	794	89	39	160	102	19.1	0.4	6.6	9.8	145.4	4.45
	795	81	37	169	134	17.4	0.5	5.8	10.0	145.6	4.18
	796	55	21	111	111	19.7	0.5	5.8	9.5	144.9	4.09
	797	74	35	156	123	21.0	0.5	6.6	9.8	145.6	4.01
	798	67	15	138	101	19.6	0.5	7.1	9.9	145.7	3.97

Group and dose	Animal No.	Cl (mEq/L)
Control	757	107.0
	758	107.5
	759	104.8
	760	107.7
	761	108.4
	762	109.4
12 mg/kg	769	107.2
	770	106.3
	771	107.7
	772	105.4
	773	108.0
	774	110.4
60 mg/kg	781	106.1
	782	104.9
	783	107.1
	784	107.9
	785	107.7
	786	105.8
300 mg/kg	793	104.8
	794	106.2
	795	108.2
	796	105.0
	797	107.0
	798	106.6

## Appendix 19 Individual necropsy findings in juvenile male rats treated orally with 4-Chlorophenol for 18 days

Study No. 49815

Organs and findings	Group and dose	Control							12 mg/kg						
		Animal No.		701	702	703	704	705	706	711	713	714	715	716	717
		Necropsy timing	S	S	S	S	S	S	S	D	S	S	S	S	S
Respiratory system															
Lung															
Macule, dark red			-	-	-	-	-	-	-	+	-	-	-	-	-
Others															
Thoracic cavity															
Retention, fluid, oily			-	-	-	-	-	-	-	+	-	-	-	-	-

Abbreviations: S, scheduled; D, dead.

Grade sign: -, none; +, mild; ++, moderate; +++, marked.

No appreciable changes in all other organs and tissues.

Organs and findings	Group and dose	60 mg/kg						300 mg/kg						
		Animal No.			725	726	727	728	729	730	737	738	739	740
	Necropsy timing	S	S	S	S	S	S	S	S	S	S	S	S	S
<b>Respiratory system</b>														
Lung	Macule, dark red	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Others</b>														
Thoracic cavity	Retention, fluid, oily	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviation: S, scheduled.

Grade sign: -, none; +, mild; ++, moderate; +++, marked.

No appreciable changes in all other organs and tissues.

## Appendix 20 Individual necropsy findings in juvenile female rats treated orally with 4-Chlorophenol for 18 days

Study No. 49815

Organs and findings	Group and dose	Control						12 mg/kg					
		751	752	753	754	755	756	763	764	765	766	767	768
	Animal No.	S	S	S	S	S	S	S	S	S	S	S	S
All organs and tissues		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

Abbreviation: S, scheduled.  
NR, no remarkable changes.

Organs and findings	Group and dose	60 mg/kg						300 mg/kg					
		775	776	777	778	779	780	787	788	789	790	791	792
	Animal No.	S	S	S	S	S	S	S	S	S	S	S	S
All organs and tissues		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

Abbreviation: S, scheduled.  
NR, no remarkable changes.

Appendix 21 Individual necropsy findings in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period Study No. 49815

Organs and findings	Group and dose	Control					12 mg/kg					
		Animal No.		707	708	709	710	712	719	720	721	722
		Necropsy timing	S	S	S	S	S	S	S	S	S	S
Urinary system												
Kidney												
Dilatation, pelvic cavity		-	-	+	-	-	-	-	-	-	-	-
Genital system												
Testis												
Softening		-	-	-	-	-	-	-	-	-	-	-
Endocrine system												
Adrenal												
Enlargement		-	-	-	+	-	-	-	-	-	-	-

Abbreviation: S, scheduled.

Grade sign: -, none; +, mild; ++, moderate; +++, marked.

No appreciable changes in all other organs and tissues.

Organs and findings	Group and dose	60 mg/kg						300 mg/kg					
		Animal No.		731	732	733	734	735	736	743	744	745	746
		Necropsy timing	S	S	S	S	S	S	S	S	S	S	S
Urinary system													
Kidney													
Dilatation, pelvic cavity		-	-	-	-	-	-	-	-	-	-	-	-
Genital system													
Testis													
Softening		-	-	-	-	-	-	-	-	-	-	+	-
Endocrine system													
Adrenal													
Enlargement		-	-	-	-	-	-	-	-	-	-	-	-

Abbreviation: S, scheduled.

Grade sign: -, none; +, mild; ++, moderate; +++, marked.

No appreciable changes in all other organs and tissues.

Appendix 22 Individual necropsy findings in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period Study No. 49815

Organs and findings	Necropsy timing	Control						12 mg/kg					
		Animal No.		757	758	759	760	761	762	769	770	771	772
		S	S	S	S	S	S	S	S	S	S	S	S
Urinary system													
Kidney				-	-	+	-	-	-	-	-	-	-
Nodule, light gray													

Abbreviation: S, scheduled.

Grade sign: -, none; +, mild; ++, moderate; +++, marked.

No appreciable changes in all other organs and tissues.

Individual necropsy findings in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal per

Organs and findings	Necropsy timing	Group and dose						60 mg/kg						300 mg/kg					
		Animal No.						781	782	783	784	785	786	793	794	795	796	797	798
		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	
Urinary system																			
Kidney																			
Nodule, light gray		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Abbreviation: S, scheduled.

Grade sign: -, none; +, mild; ++, moderate; +++, marked.

No appreciable changes in all other organs and tissues.

## Appendix 23 Individual organ weights in juvenile male rats treated orally with 4-Chlorophenol for 18 days

Group and dose	Animal No.	Final body weight		Brain		Pituitary		Thyroids		Heart	
		(g)	(g)	(g/100gB. W.)	(mg)	(mg/100gB. W.)	(mg)	(mg/100gB. W.)	(mg)	(mg/100gB. W.)	
Control	701	55.5	1.62	2.92	2.3	4.1	5.5	9.9	303.7	547.2	
	702	68.1	1.68	2.47	2.5	3.7	7.8	11.5	357.8	525.4	
	703	63.6	1.59	2.50	1.8	2.8	6.7	10.5	313.7	493.2	
	704	53.1	1.56	2.94	1.7	3.2	7.0	13.2	282.9	532.8	
	705	61.1	1.60	2.62	2.5	4.1	8.0	13.1	377.5	617.8	
	706	66.8	1.60	2.40	2.6	3.9	6.9	10.3	424.6	635.6	
12 mg/kg	713	60.4	1.65	2.73	2.6	4.3	5.6	9.3	334.0	553.0	
	714	69.2	1.68	2.43	2.1	3.0	10.1	14.6	396.6	573.1	
	715	60.7	1.65	2.72	2.1	3.5	6.6	10.9	382.6	630.3	
	716	55.0	1.58	2.87	2.1	3.8	7.6	13.8	305.5	555.5	
	717	53.5	1.55	2.90	2.7	5.0	5.2	9.7	296.9	555.0	
	718	65.8	1.60	2.43	3.1	4.7	7.4	11.2	398.6	605.8	
60 mg/kg	725	62.7	1.57	2.50	2.1	3.3	5.9	9.4	336.8	537.2	
	726	68.2	1.70	2.49	2.9	4.3	6.1	8.9	393.1	576.4	
	727	60.2	1.56	2.59	2.3	3.8	8.2	13.6	333.2	553.5	
	728	56.5	1.58	2.80	2.4	4.2	6.6	11.7	344.1	609.0	
	729	53.9	1.51	2.80	2.3	4.3	7.4	13.7	309.0	573.3	
	730	64.4	1.71	2.66	2.7	4.2	6.1	9.5	332.2	515.8	
300 mg/kg	737	60.5	1.56	2.58	2.7	4.5	8.0	13.2	350.5	579.3	
	738	66.9	1.63	2.44	2.2	3.3	7.6	11.4	381.0	569.5	
	739	62.4	1.57	2.52	2.7	4.3	7.7	12.3	354.0	567.3	
	740	53.7	1.54	2.87	1.6	3.0	7.6	14.2	331.1	616.6	
	741	56.8	1.58	2.78	2.3	4.0	5.9	10.4	313.1	551.2	
	742	63.7	1.62	2.54	2.5	3.9	5.7	8.9	366.2	574.9	

Appendix 23 - continued

## Individual organ weights in juvenile male rats treated orally with 4-Chlorophenol for 18 days

Group and dose	Animal No.	Lungs		Thymus		Liver		Spleen		Kidneys	
		(mg)	(mg/100gB.W.)	(mg)	(mg/100gB.W.)	(g)	(g/100gB.W.)	(mg)	(mg/100gB.W.)	(g)	(g/100gB.W.)
Control	701	412.5	743.2	195.6	352.4	2.14	3.86	259.8	468.1	0.63	1.14
	702	580.3	852.1	289.1	424.5	2.91	4.27	301.6	442.9	0.83	1.22
	703	487.2	766.0	274.7	431.9	2.73	4.29	336.8	529.6	0.65	1.02
	704	455.7	858.2	146.5	275.9	2.11	3.97	190.0	357.8	0.55	1.04
	705	464.7	760.6	212.4	347.6	2.81	4.60	289.9	474.5	0.66	1.08
	706	572.3	856.7	265.9	398.1	3.16	4.73	360.2	539.2	0.74	1.11
12 mg/kg	713	452.5	749.2	265.1	438.9	2.70	4.47	342.4	566.9	0.68	1.13
	714	521.9	754.2	272.9	394.4	2.80	4.05	274.6	396.8	0.75	1.08
	715	490.2	807.6	274.8	452.7	2.84	4.68	320.4	527.8	0.71	1.17
	716	447.5	813.6	211.1	383.8	2.23	4.05	216.4	393.5	0.60	1.09
	717	458.4	856.8	239.9	448.4	2.31	4.32	286.1	534.8	0.61	1.14
	718	527.5	801.7	274.3	416.9	2.81	4.27	294.1	447.0	0.72	1.09
60 mg/kg	725	471.1	751.4	276.5	441.0	2.67	4.26	263.2	419.8	0.65	1.04
	726	521.4	764.5	329.3	482.8	2.96	4.34	295.7	433.6	0.82	1.20
	727	482.7	801.8	230.4	382.7	2.68	4.45	301.6	501.0	0.64	1.06
	728	454.5	804.4	189.7	335.8	2.51	4.44	241.6	427.6	0.62	1.10
	729	483.4	896.8	272.6	505.8	2.40	4.45	284.6	528.0	0.57	1.06
	730	574.8	892.5	258.2	400.9	2.61	4.05	345.3	536.2	0.87	1.35
300 mg/kg	737	488.5	807.4	271.3	448.4	2.82	4.66	261.2	431.7	0.68	1.12
	738	535.9	801.0	311.1	465.0	3.28	4.90	233.8	349.5	0.71	1.06
	739	510.1	817.5	265.4	425.3	2.97	4.76	334.3	535.7	0.71	1.14
	740	423.0	787.7	184.3	343.2	2.37	4.41	187.4	349.0	0.55	1.02
	741	463.3	815.7	255.1	449.1	2.86	5.04	262.6	462.3	0.64	1.13
	742	524.7	823.7	299.6	470.3	3.12	4.90	317.7	498.7	0.77	1.21

Group and dose	Animal No.	Adrenals		Epididymides		Testes	
		(mg)	(mg/100gB.W.)	(mg)	(mg/100gB.W.)	(mg)	(mg/100gB.W.)
Control	701	14.5	26.1	49.8	89.7	280.3	505.0
	702	20.2	29.7	63.9	93.8	352.5	517.6
	703	18.4	28.9	54.7	86.0	293.2	461.0
	704	14.3	26.9	45.0	84.7	258.5	486.8
	705	14.3	23.4	47.5	77.7	308.8	505.4
	706	16.9	25.3	59.5	89.1	314.7	471.1
12 mg/kg	713	16.8	27.8	62.0	102.6	305.8	506.3
	714	18.2	26.3	56.8	82.1	295.3	426.7
	715	17.4	28.7	48.5	79.9	273.9	451.2
	716	15.4	28.0	50.0	90.9	291.4	529.8
	717	13.7	25.6	55.6	103.9	315.8	590.3
	718	19.9	30.2	52.2	79.3	310.0	471.1
60 mg/kg	725	16.1	25.7	63.0	100.5	304.9	486.3
	726	18.4	27.0	66.5	97.5	323.6	474.5
	727	16.5	27.4	51.4	85.4	309.8	514.6
	728	13.7	24.2	51.7	91.5	293.6	519.6
	729	15.8	29.3	48.6	90.2	278.8	517.3
	730	15.6	24.2	46.4	72.0	316.3	491.1
300 mg/kg	737	18.7	30.9	49.4	81.7	328.3	542.6
	738	17.1	25.6	51.6	77.1	298.1	445.6
	739	17.0	27.2	54.9	88.0	305.1	488.9
	740	14.3	26.6	51.3	95.5	267.8	498.7
	741	14.2	25.0	53.6	94.4	288.5	507.9
	742	16.2	25.4	45.3	71.1	281.8	442.4

## Appendix 24 Individual organ weights in juvenile female rats treated orally with 4-Chlorophenol for 18 days

Group and dose	Animal No.	Final body weight		Brain		Pituitary		Thyroids		Heart	
		(g)	(g)	(g/100gB. W.)	(mg)	(mg/100gB. W.)	(mg)	(mg/100gB. W.)	(mg)	(mg/100gB. W.)	
Control	751	53.6	1.50	2.80	2.8	5.2	6.1	11.4	299.9	559.5	
	752	58.7	1.50	2.56	2.6	4.4	5.8	9.9	317.0	540.0	
	753	61.0	1.60	2.62	3.7	6.1	5.9	9.7	319.9	524.4	
	754	46.6	1.48	3.18	2.3	4.9	4.5	9.7	259.9	557.7	
	755	50.4	1.48	2.94	2.4	4.8	6.4	12.7	303.0	601.2	
	756	66.4	1.52	2.29	2.8	4.2	6.2	9.3	358.1	539.3	
12 mg/kg	763	56.4	1.48	2.62	2.6	4.6	6.5	11.5	325.8	577.7	
	764	60.6	1.51	2.49	2.3	3.8	7.0	11.6	327.4	540.3	
	765	61.8	1.59	2.57	3.6	5.8	6.4	10.4	350.1	566.5	
	766	49.0	1.59	3.24	2.4	4.9	6.0	12.2	287.7	587.1	
	767	51.2	1.56	3.05	3.1	6.1	7.0	13.7	293.3	572.9	
	768	63.4	1.52	2.40	3.0	4.7	6.9	10.9	372.3	587.2	
60 mg/kg	775	56.7	1.60	2.82	2.8	4.9	8.2	14.5	327.4	577.4	
	776	58.1	1.52	2.62	3.1	5.3	7.0	12.0	286.1	492.4	
	777	59.9	1.59	2.65	2.3	3.8	9.5	15.9	310.8	518.9	
	778	46.1	1.43	3.10	1.7	3.7	4.8	10.4	236.0	511.9	
	779	52.8	1.50	2.84	2.7	5.1	6.2	11.7	256.9	486.6	
	780	61.5	1.51	2.46	2.9	4.7	7.9	12.8	331.7	539.3	
300 mg/kg	787	54.0	1.51	2.80	2.8	5.2	7.3	13.5	301.2	557.8	
	788	60.4	1.45	2.40	2.8	4.6	7.1	11.8	332.0	549.7	
	789	64.5	1.62	2.51	2.8	4.3	8.3	12.9	336.7	522.0	
	790	45.0	1.37	3.04	2.2	4.9	5.8	12.9	244.8	544.0	
	791	48.9	1.46	2.99	2.4	4.9	4.7	9.6	254.9	521.3	
	792	61.1	1.56	2.55	2.9	4.7	6.2	10.1	304.4	498.2	

Group and dose	Animal No.	Lungs		Thymus		Liver		Spleen		Kidneys	
		(mg)	(mg/100gB. W.)	(mg)	(mg/100gB. W.)	(g)	(g/100gB. W.)	(mg)	(mg/100gB. W.)	(g)	(g/100gB. W.)
Control	751	610.8	1139.6	225.9	421.5	2.23	4.16	217.7	406.2	0.59	1.10
	752	408.9	696.6	316.3	538.8	2.47	4.21	266.4	453.8	0.64	1.09
	753	460.3	754.6	287.0	470.5	2.57	4.21	247.3	405.4	0.63	1.03
	754	398.9	856.0	206.5	443.1	1.80	3.86	192.0	412.0	0.56	1.20
	755	417.6	828.6	274.5	544.6	2.16	4.29	293.5	582.3	0.55	1.09
	756	459.5	692.0	304.2	458.1	3.07	4.62	329.9	496.8	0.69	1.04
12 mg/kg	763	432.8	767.4	287.1	509.0	2.40	4.26	347.9	616.8	0.66	1.17
	764	488.1	805.4	278.3	459.2	2.54	4.19	261.5	431.5	0.63	1.04
	765	462.0	747.6	254.4	411.7	2.73	4.42	233.7	378.2	0.64	1.04
	766	432.8	883.3	227.6	464.5	2.32	4.73	207.7	423.9	0.60	1.22
	767	421.7	823.6	245.8	480.1	2.15	4.20	216.0	421.9	0.61	1.19
	768	518.0	817.0	263.6	415.8	2.75	4.34	300.6	474.1	0.67	1.06
60 mg/kg	775	478.1	843.2	256.9	453.1	2.56	4.51	293.1	516.9	0.52	0.92
	776	469.6	808.3	257.6	443.4	2.45	4.22	291.1	501.0	0.62	1.07
	777	452.3	755.1	208.2	347.6	2.51	4.19	265.3	442.9	0.48	0.80
	778	360.8	782.6	183.5	398.0	2.02	4.38	234.3	508.2	0.54	1.17
	779	472.8	895.5	234.8	444.7	2.24	4.24	276.9	524.4	0.54	1.02
	780	475.6	773.3	252.0	409.8	2.39	3.89	302.6	492.0	0.66	1.07
300 mg/kg	787	443.2	820.7	267.2	494.8	2.74	5.07	225.2	417.0	0.60	1.11
	788	481.7	797.5	250.2	414.2	2.91	4.82	263.6	436.4	0.67	1.11
	789	527.8	818.3	271.8	421.4	3.23	5.01	245.2	380.2	0.68	1.05
	790	355.4	789.8	158.6	352.4	2.22	4.93	177.9	395.3	0.51	1.13
	791	384.4	786.1	239.9	490.6	2.09	4.27	188.3	385.1	0.51	1.04
	792	481.6	788.2	287.6	470.7	3.05	4.99	294.3	481.7	0.67	1.10

Group and dose	Animal No.	Adrenals		Ovaries	
		(mg)	(mg/100gB.W.)	(mg)	(mg/100gB.W.)
Control	751	15.4	28.7	17.2	32.1
	752	16.5	28.1	18.2	31.0
	753	16.3	26.7	16.6	27.2
	754	11.1	23.8	12.5	26.8
	755	13.2	26.2	18.5	36.7
	756	20.6	31.0	21.0	31.6
12 mg/kg	763	17.0	30.1	17.9	31.7
	764	18.3	30.2	15.4	25.4
	765	16.0	25.9	18.5	29.9
	766	13.0	26.5	15.5	31.6
	767	14.7	28.7	14.9	29.1
	768	16.3	25.7	19.8	31.2
60 mg/kg	775	14.8	26.1	14.7	25.9
	776	16.0	27.5	13.7	23.6
	777	16.2	27.0	16.6	27.7
	778	13.5	29.3	17.2	37.3
	779	16.3	30.9	15.8	29.9
	780	16.5	26.8	14.8	24.1
300 mg/kg	787	14.1	26.1	16.0	29.6
	788	17.6	29.1	13.6	22.5
	789	14.6	22.6	16.5	25.6
	790	12.5	27.8	14.6	32.4
	791	15.4	31.5	15.6	31.9
	792	14.7	24.1	13.9	22.7

Appendix 25 Individual organ weights in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Final body weight (g)	Brain		Pituitary		Thyroids		Heart	
			(g)	(g/100gB.W.)	(mg)	(mg/100gB.W.)	(mg)	(mg/100gB.W.)	(mg)	(mg/100gB.W.)
Control	707	501.0	2.15	0.43	13.2	2.6	24.9	5.0	1657.8	330.9
	708	462.5	2.22	0.48	13.1	2.8	15.2	3.3	1474.0	318.7
	709	505.6	2.41	0.48	16.0	3.2	23.3	4.6	1785.4	353.1
	710	538.3	2.29	0.43	16.1	3.0	24.4	4.5	1710.7	317.8
	712	556.0	2.30	0.41	13.6	2.4	21.7	3.9	1786.5	321.3
12 mg/kg	719	441.2	2.15	0.49	12.6	2.9	22.4	5.1	1464.7	332.0
	720	451.6	2.09	0.46	11.6	2.6	28.3	6.3	1629.9	360.9
	721	440.4	2.23	0.51	11.2	2.5	25.3	5.7	2032.5	461.5
	722	489.4	2.29	0.47	13.4	2.7	20.4	4.2	1570.0	320.8
	723	501.7	2.12	0.42	13.1	2.6	26.4	5.3	1728.2	344.5
	724	480.6	2.25	0.47	11.8	2.5	28.6	6.0	1520.8	316.4
60 mg/kg	731	437.3	2.11	0.48	13.0	3.0	28.5	6.5	1652.3	377.8
	732	458.2	2.22	0.48	12.1	2.6	23.8	5.2	1632.4	356.3
	733	456.5	2.18	0.48	12.6	2.8	26.9	5.9	1806.7	395.8
	734	445.6	2.21	0.50	14.2	3.2	21.5	4.8	1439.6	323.1
	735	516.0	2.21	0.43	12.0	2.3	23.6	4.6	1809.3	350.6
	736	535.2	2.24	0.42	13.6	2.5	29.4	5.5	1666.6	311.4
300 mg/kg	743	463.3	2.11	0.46	11.1	2.4	28.9	6.2	1712.6	369.7
	744	488.8	2.29	0.47	13.3	2.7	17.4	3.6	1690.1	345.8
	745	437.0	2.16	0.49	10.9	2.5	22.2	5.1	1511.4	345.9
	746	417.5	2.16	0.52	12.8	3.1	18.6	4.5	1634.8	391.6
	747	538.2	2.19	0.41	13.6	2.5	24.7	4.6	1878.2	349.0
	748	486.0	2.34	0.48	12.9	2.7	26.6	5.5	1767.6	363.7

Appendix 25 - continued

## Individual organ weights in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Lungs		Thymus		Liver		Spleen		Kidneys	
		(mg)	(mg/100gB. W.)	(mg)	(mg/100gB. W.)	(g)	(g/100gB. W.)	(mg)	(mg/100gB. W.)	(g)	(g/100gB. W.)
Control	707	1626.1	324.6	405.2	80.9	16.66	3.33	766.7	153.0	2.99	0.60
	708	1527.1	330.2	406.4	87.9	13.95	3.02	806.2	174.3	2.95	0.64
	709	1589.6	314.4	484.0	95.7	14.59	2.89	1042.2	206.1	3.62	0.72
	710	1719.5	319.4	647.3	120.2	16.38	3.04	1198.6	222.7	3.97	0.74
	712	1640.3	295.0	542.4	97.6	16.30	2.93	958.4	172.4	3.74	0.67
12 mg/kg	719	1429.6	324.0	441.7	100.1	12.53	2.84	995.9	225.7	2.82	0.64
	720	1597.8	353.8	679.0	150.4	13.65	3.02	883.8	195.7	2.93	0.65
	721	1506.2	342.0	536.1	121.7	13.17	2.99	910.5	206.7	2.81	0.64
	722	1602.8	327.5	602.4	123.1	15.08	3.08	807.3	165.0	3.03	0.62
	723	1676.8	334.2	495.1	98.7	15.30	3.05	913.8	182.1	3.50	0.70
	724	1547.6	322.0	537.7	111.9	14.66	3.05	845.6	175.9	3.13	0.65
60 mg/kg	731	1471.9	336.6	496.3	113.5	12.77	2.92	671.1	153.5	2.63	0.60
	732	1493.6	326.0	518.8	113.2	15.19	3.32	1016.1	221.8	2.83	0.62
	733	1481.8	324.6	557.0	122.0	14.74	3.23	829.0	181.6	3.21	0.70
	734	1449.0	325.2	506.9	113.8	14.00	3.14	717.3	161.0	2.98	0.67
	735	1512.3	293.1	511.3	99.1	16.80	3.26	975.1	189.0	3.50	0.68
	736	1634.1	305.3	451.7	84.4	16.70	3.12	1004.2	187.6	3.41	0.64
300 mg/kg	743	1589.2	343.0	565.1	122.0	14.16	3.06	792.5	171.1	2.92	0.63
	744	1441.4	294.9	510.0	104.3	16.91	3.46	806.3	165.0	3.13	0.64
	745	1445.0	330.7	538.5	123.2	12.59	2.88	817.2	187.0	2.64	0.60
	746	1481.8	354.9	302.8	72.5	13.19	3.16	657.1	157.4	2.70	0.65
	747	1779.3	330.6	544.3	101.1	14.88	2.76	1001.1	186.0	3.50	0.65
	748	1593.6	327.9	463.9	95.5	13.54	2.79	977.4	201.1	3.09	0.64

## Individual organ weights in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Adrenals		Epididymides		Testes	
		(mg)	(mg/100gB.W.)	(mg)	(mg/100gB.W.)	(mg)	(mg/100gB.W.)
Control	707	87.0	17.4	1210.2	241.6	3309.2	660.5
	708	68.8	14.9	1293.2	279.6	3542.0	765.8
	709	90.8	18.0	1173.9	232.2	3681.1	728.1
	710	131.7	24.5	1203.7	223.6	3984.2	740.1
	712	93.9	16.9	1318.4	237.1	4029.2	724.7
12 mg/kg	719	80.8	18.3	1330.7	301.6	3213.9	728.4
	720	72.2	16.0	963.9	213.4	3355.2	743.0
	721	70.5	16.0	1080.5	245.3	3151.1	715.5
	722	80.4	16.4	1152.7	235.5	3630.3	741.8
	723	66.7	13.3	1185.8	236.4	3655.2	728.6
	724	67.2	14.0	1220.8	254.0	3890.0	809.4
60 mg/kg	731	92.7	21.2	1217.8	278.5	3994.5	913.4
	732	76.7	16.7	1066.5	232.8	3424.4	747.4
	733	68.7	15.0	1292.3	283.1	3405.4	746.0
	734	67.5	15.1	1145.1	257.0	3759.5	843.7
	735	59.3	11.5	1181.6	229.0	3819.7	740.3
	736	83.5	15.6	1306.8	244.2	4113.4	768.6
300 mg/kg	743	55.7	12.0	1106.2	238.8	3179.9	686.4
	744	60.4	12.4	1247.7	255.3	3431.3	702.0
	745	68.3	15.6	1077.6	246.6	3278.7	750.3
	746	54.9	13.1	1206.8	289.1	3420.5	819.3
	747	94.8	17.6	640.1	118.9	3512.9	652.7
	748	64.1	13.2	1318.9	271.4	3480.7	716.2

Appendix 26 Individual organ weights in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Final body weight		Brain		Pituitary		Thyroids		Heart	
		(g)	(g)	(g/100gB.W.)	(mg)	(mg/100gB.W.)	(mg)	(mg/100gB.W.)	(mg)	(mg/100gB.W.)	
Control	757	280.1	2.05	0.73	11.9	4.2	17.7	6.3	1084.2	387.1	
	758	262.8	1.99	0.76	14.3	5.4	19.4	7.4	1009.3	384.1	
	759	335.5	2.22	0.66	17.2	5.1	21.4	6.4	1175.7	350.4	
	760	287.3	2.13	0.74	22.1	7.7	24.9	8.7	1095.5	381.3	
	761	278.2	1.94	0.70	11.4	4.1	15.9	5.7	1033.5	371.5	
	762	259.3	2.01	0.78	12.0	4.6	18.0	6.9	973.4	375.4	
12 mg/kg	769	256.9	2.02	0.79	13.7	5.3	16.1	6.3	1245.2	484.7	
	770	294.3	2.17	0.74	15.9	5.4	18.8	6.4	1057.4	359.3	
	771	257.8	1.94	0.75	15.4	6.0	15.2	5.9	922.8	358.0	
	772	265.8	2.09	0.79	15.2	5.7	16.9	6.4	1077.4	405.3	
	773	312.3	2.07	0.66	15.2	4.9	17.6	5.6	1035.3	331.5	
	774	247.6	2.04	0.82	15.4	6.2	14.8	6.0	1008.6	407.4	
60 mg/kg	781	245.1	2.04	0.83	10.5	4.3	17.1	7.0	830.3	338.8	
	782	281.7	2.06	0.73	14.3	5.1	18.7	6.6	1093.1	388.0	
	783	244.3	2.01	0.82	14.5	5.9	15.7	6.4	996.2	407.8	
	784	270.5	2.01	0.74	16.0	5.9	15.2	5.6	991.6	366.6	
	785	243.9	2.09	0.86	16.7	6.8	20.6	8.4	1074.3	440.5	
	786	274.3	2.08	0.76	18.3	6.7	18.4	6.7	1144.6	417.3	
300 mg/kg	793	300.3	1.99	0.66	15.3	5.1	23.5	7.8	1112.8	370.6	
	794	258.9	2.06	0.80	15.3	5.9	20.3	7.8	1003.4	387.6	
	795	261.1	1.98	0.76	17.1	6.5	11.3	4.3	1134.9	434.7	
	796	291.8	2.01	0.69	17.3	5.9	20.6	7.1	1075.1	368.4	
	797	280.6	2.00	0.71	17.7	6.3	16.4	5.8	1085.5	386.8	
	798	236.2	2.05	0.87	14.9	6.3	12.6	5.3	903.8	382.6	

## Appendix 26 - continued

## Individual organ weights in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Group and dose	Animal No.	Lungs		Thymus		Liver		Spleen		Kidneys	
		(mg)	(mg/100gB.W.)	(mg)	(mg/100gB.W.)	(g)	(g/100gB.W.)	(mg)	(mg/100gB.W.)	(g)	(g/100gB.W.)
Control	757	1182.3	422.1	457.4	163.3	7.46	2.66	495.3	176.8	1.84	0.66
	758	1177.8	448.2	536.0	204.0	6.77	2.58	711.4	270.7	1.74	0.66
	759	1407.6	419.6	451.0	134.4	10.61	3.16	836.6	249.4	2.70	0.80
	760	1192.4	415.0	440.4	153.3	8.84	3.08	692.9	241.2	1.99	0.69
	761	1106.6	397.8	327.7	117.8	7.70	2.77	657.6	236.4	1.96	0.70
	762	1161.9	448.1	515.4	198.8	7.48	2.88	594.5	229.3	1.70	0.66
12 mg/kg	769	1108.2	431.4	589.4	229.4	6.76	2.63	719.7	280.1	1.69	0.66
	770	1253.1	425.8	582.8	198.0	8.24	2.80	658.8	223.9	2.00	0.68
	771	1077.7	418.0	417.1	161.8	6.81	2.64	697.4	270.5	1.71	0.66
	772	1172.9	441.3	338.4	127.3	7.85	2.95	481.1	181.0	1.79	0.67
	773	1199.3	384.0	461.0	147.6	9.09	2.91	571.5	183.0	2.14	0.69
	774	1050.5	424.3	332.6	134.3	6.86	2.77	539.7	218.0	1.75	0.71
60 mg/kg	781	1014.5	413.9	346.0	141.2	6.73	2.75	678.6	276.9	1.63	0.67
	782	1166.4	414.1	359.9	127.8	8.46	3.00	507.9	180.3	1.84	0.65
	783	1106.9	453.1	378.9	155.1	7.35	3.01	605.7	247.9	1.75	0.72
	784	1218.3	450.4	469.6	173.6	7.54	2.79	545.5	201.7	1.90	0.70
	785	1112.6	456.2	330.6	135.5	7.78	3.19	465.2	190.7	1.81	0.74
	786	1182.9	431.2	363.5	132.5	8.73	3.18	539.4	196.6	1.96	0.71
300 mg/kg	793	1234.5	411.1	605.6	201.7	8.71	2.90	666.1	221.8	1.85	0.62
	794	1157.8	447.2	415.4	160.4	7.93	3.06	491.6	189.9	1.71	0.66
	795	1198.3	458.9	359.3	137.6	8.69	3.33	723.7	277.2	1.91	0.73
	796	1216.5	416.9	525.0	179.9	8.29	2.84	689.5	236.3	2.21	0.76
	797	1195.2	425.9	429.4	153.0	8.51	3.03	651.7	232.3	1.91	0.68
	798	1039.2	440.0	268.6	113.7	7.53	3.19	482.6	204.3	1.78	0.75

Appendix 26 - continued

Individual organ weights in juvenile female rats treated orally with 4-Chlorophenol for 18 days  
followed by 63-day withdrawal period

Group and dose	Animal No.	Adrenals		Ovaries	
		(mg)	(mg/100gB.W.)	(mg)	(mg/100gB.W.)
Control	757	68.2	24.3	70.3	25.1
	758	70.4	26.8	104.5	39.8
	759	86.9	25.9	100.4	29.9
	760	92.8	32.3	86.9	30.2
	761	84.2	30.3	80.3	28.9
	762	63.6	24.5	64.7	25.0
12 mg/kg	769	78.6	30.6	101.9	39.7
	770	70.6	24.0	80.6	27.4
	771	79.3	30.8	81.8	31.7
	772	76.0	28.6	75.5	28.4
	773	86.0	27.5	82.3	26.4
	774	71.4	28.8	87.8	35.5
60 mg/kg	781	63.2	25.8	69.8	28.5
	782	73.8	26.2	86.4	30.7
	783	66.6	27.3	83.6	34.2
	784	64.4	23.8	102.3	37.8
	785	72.1	29.6	82.4	33.8
	786	79.0	28.8	70.6	25.7
300 mg/kg	793	84.0	28.0	83.9	27.9
	794	69.1	26.7	75.8	29.3
	795	75.6	29.0	77.0	29.5
	796	68.2	23.4	101.9	34.9
	797	81.7	29.1	77.6	27.7
	798	71.4	30.2	80.7	34.2

## Appendix 27 Individual organ weights in juvenile male rat found dead during oral treatment with 4-Chlorophenol for 18 days

Group and dose	Animal No.	Final body weight (g)	Brain		Pituitary		Thyroids		Heart	
			(g)	(g/100gB. W.)	(mg)	(mg/100gB. W.)	(mg)	(mg/100gB. W.)	(mg)	(mg/100gB. W.)
Control	711	34.8	1.30	3.74	1.3	3.7	4.5	12.9	218.7	628.4

Appendix 27 - continued

## Individual organ weights in juvenile male rat found dead during oral treatment with 4-Chlorophenol for 18 days

Study No. 49815

Group and dose	Animal No.	Lungs		Thymus		Liver		Spleen		Kidneys	
		(mg)	(mg/100gB. W.)	(mg)	(mg/100gB. W.)	(g)	(g/100gB. W.)	(mg)	(mg/100gB. W.)	(g)	(g/100gB. W.)
Control	711	740.7	2128.4	114.2	328.2	1.59	4.57	189.7	545.1	0.56	1.61

Appendix 27 - continued

## Individual organ weights in juvenile male rat found dead during oral treatment with 4-Chlorophenol for 18 days

Study No. 49815

Group and dose	Animal No.	Adrenals		Epididymides		Testes	
		(mg)	(mg/100gB.W.)	(mg)	(mg/100gB.W.)	(mg)	(mg/100gB.W.)
Control	711	5.3	15.2	20.0	57.5	67.6	194.3

## Appendix 28 Individual histopathological findings in juvenile male rats treated orally with 4-Chlorophenol for 18 days

Study No. 49815

Organs and findings	Group and dose	Control							12 mg/kg							
		Animal No.		701	702	703	704	705	706	711	713	714	715	716	717	718
		Necropsy timing		S	S	S	S	S	S	D	S	S	S	S	S	
Respiratory system																
Lung		-	-	-	-	-	-	-	-	+	*	*	*	*	*	
Hemorrhage																

Abbreviations: S, scheduled; D, dead.

Grade sign: -, none; +, mild; ++, moderate; +++, marked.

\*, not examined.

There are no remarkable changes in the liver, thymus, spleen, heart, kidney, testis, epididymis, pituitary, thyroid, adrenal and brain in control group.

Organs and findings	Group and dose	60 mg/kg						300 mg/kg					
		Animal No.		725	726	727	728	729	730	737	738	739	740
		Necropsy timing	S	S	S	S	S	S	S	S	S	S	S
Respiratory system			*	*	*	*	*	*	*	-	-	-	-
Lung													
Hemorrhage													

Abbreviation: S, scheduled.

Grade sign: -, none; +, mild; ++, moderate; +++, marked.

\*, not examined.

There are no remarkable changes in the liver, thymus, spleen, heart, kidney, testis, epididymis, pituitary, thyroid, adrenal and brain in 300 mg/kg group.

## Appendix 29 Individual histopathological findings in juvenile female rats treated orally with 4-Chlorophenol for 18 days

Study No. 49815

Organs and findings	Group and dose	Control						12 mg/kg					
		Animal No.		751	752	753	754	755	756	763	764	765	766
		Necropsy timing	S	S	S	S	S	S	S	S	S	S	S
Respiratory system	Lung	Accumulation, foam cell, focal	+	-	-	-	-	-	-	*	*	*	*
										*	*	*	*

Abbreviation: S, scheduled.

Grade sign: -, none; +, mild; ++, moderate; +++, marked.

\*, not examined.

There are no remarkable changes in the liver, thymus, spleen, Heart, kidney, ovary, pituitary, thyroid, adrenal and brain in control group.

Organs and findings	Group and dose	60 mg/kg						300 mg/kg					
		Animal No.		775	776	777	778	779	780	787	788	789	790
		Necropsy timing	S	S	S	S	S	S	S	S	S	S	S
Respiratory system			*	*	*	*	*	*	*	-	-	-	-
Lung		Accumulation, foam cell, focal											

Abbreviation: S, scheduled.

Grade sign: -, none; +, mild; ++, moderate; +++, marked.

\*, not examined.

There are no remarkable changes in the liver, thymus, spleen, Heart, kidney, ovary, pituitary, thyroid, adrenal and brain in 300 mg/kg group.

## Appendix 30 Individual histopathological findings in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Organs and findings	Group and dose	Control					12 mg/kg					
		Animal No.		707	708	709	710	712	719	720	721	722
		Necropsy timing	S	S	S	S	S	S	S	S	S	S
Digestive system												
Liver			-	-	-	-	-		*	*	*	*
Necrosis, hepatocyte, focal												*
Cardiovascular system									*	*	*	*
Heart			-	-	-	-	-		*	*	*	*
Degeneration/fibrosis, myocardium, focal												*
Urinary system									*	*	*	*
Kidney			-	-	+	-	-		*	*	*	*
Dilatation, pelvic cavity												*
Genital system									*	*	*	*
Testis			-	-	-	-	-		*	*	*	*
Atrophy, seminiferous tubule												*
Epididymis			-	-	-	-	-		*	*	*	*
Decrease, sperm, lumen												*

Abbreviation: S, scheduled.

Grade sign: -, none; +, mild; ++, moderate; +++, marked.

\*, not examined.

There are no remarkable changes in the lung, thymus, spleen, pituitary, thyroid, adrenal and brain in control group.

## Individual histopathological findings in juvenile male rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Organs and findings	Necropsy timing	Group and dose						60 mg/kg						300 mg/kg							
		Animal No.		731	732	733	734	735	736	743	744	745	746	747	748	743	744	745	746	747	748
		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	
Digestive system																					
Liver		*	*	*	*	*	*	*	*	-	-	-	-	-	-	-	-	+			
Necrosis, hepatocyte, focal																					
Cardiovascular system																					
Heart		*	*	*	*	*	*	*	*	+	-	-	-	-	-	-	-	-	-	-	
Degeneration/fibrosis, myocardium, focal																					
Urinary system																					
Kidney		*	*	*	*	*	*	*	*	-	-	-	-	-	-	-	-	-	-	-	
Dilatation, pelvic cavity																					
Genital system																					
Testis		*	*	*	*	*	*	*	*	-	-	-	-	-	-	+++	-				
Atrophy, seminiferous tubule																					
Epididymis		*	*	*	*	*	*	*	*	-	-	-	-	-	+++	-					
Decrease, sperm, lumen																					

Abbreviation: S, scheduled.

Grade sign: -, none; +, mild; ++, moderate; +++, marked.

\*, not examined.

There are no remarkable changes in the lung, thymus, spleen, pituitary, thyroid, adrenal and brain in 300 mg/kg group.

Appendix 31 Individual histopathological findings in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Organs and findings	Group and dose	Control						12 mg/kg					
		Animal No.		757	758	759	760	761	762	769	770	771	772
		Necropsy timing	S	S	S	S	S	S	S	S	S	S	S
Urinary system										*	*	*	*
Kidney			-	-	+	-	-	-	-	*	*	*	*
Cellular infiltration, mixed			-	-	-	-	-	+	-				
Mineralization, corticomedullary													

Abbreviation: S, scheduled.

Grade sign: -, none; +, mild; ++, moderate; +++, marked.

\*, not examined.

There are no remarkable changes in the liver, lung, thymus, spleen, heart, ovary, pituitary, thyroid, adrenal and brain in control group.

## Individual histopathological findings in juvenile female rats treated orally with 4-Chlorophenol for 18 days followed by 63-day withdrawal period

Organs and findings	Group and dose	60 mg/kg						300 mg/kg					
		Animal No.		781	782	783	784	785	786	793	794	795	796
		Necropsy timing	S	S	S	S	S	S	S	S	S	S	S
Urinary system			*	*	*	*	*	*	*	-	-	-	-
Kidney										-	-	-	-
Cellular infiltration, mixed													
Mineralization, corticomedullary													

Abbreviation: S, scheduled.

Grade sign: -, none; +, mild; ++, moderate; +++, marked.

\*, not examined.

There are no remarkable changes in the liver, lung, thymus, spleen, heart, ovary, pituitary, thyroid, adrenal and brain in 300 mg/kg group.