

HESS DB操作実習

反復投与毒性データの検索と閲覧

2012年11月26日

(独)製品評価技術基盤機構
化学物質管理センター

最初の画面 (検索画面)

The screenshot shows the 'Main [HessDB_Search]' window. It has a menu bar with 'Open View', 'Save View', 'Study_View', 'Adme_View', 'Mechanism_View', 'List', and 'Help'. Below the menu is a 'Search' button. The main area has two tabs: 'Search Results' and 'Search Conditions'. The 'Search Conditions' tab is active, displaying the text 'Please set the search conditions.' Below this are three tabs: 'Chemical' (highlighted with a red box), 'Histopathology' (highlighted with a blue box), and 'Measured Data' (highlighted with a green box). Under the 'Chemical' tab, there are five checked checkboxes: 'Chem_No.', 'Study_No.', 'Cas_No.', 'Chemical Name', and 'MOL File', each followed by a text input field. Arrows point from the 'Chemical' tab to the text '化学構造による検索' (Search by chemical structure), from 'Histopathology' to '病理所見による検索' (Search by histopathology), and from 'Measured Data' to '測定値による検索' (Search by measured values). At the bottom left is an 'Add' button. On the right, there is a 'Conditions' table with columns 'No.', 'Type', and 'Conditions'. Below the table are 'Clear', a dropdown menu, and 'Delete' buttons.

Search Results Search Conditions

Please set the search conditions.

Chemical Histopathology Measured Data

☒ Chem_No.

☒ Study_No.

☒ Cas_No.

☒ Chemical Name

☒ MOL File

化学構造による検索 病理所見による検索 測定値による検索

Add

Conditions

No.	Type	Conditions
-----	------	------------

Clear Delete

全物質リストの表示

- HESS DBに収載されている物質の一覧を閲覧したい場合

The screenshot shows the 'Main [HessDB_Search]' window. The menu bar includes 'Open View', 'Save View', 'Study_View', 'Adme_View', 'Mechanism_View', 'List', and 'Help'. The 'Search Results' tab is active, and the 'Search Conditions' sub-tab is selected. A red box highlights the 'Chemical' tab, and a red arrow points to the 'Search' button with the text 'クリック' (Click). The search conditions section includes checkboxes for 'Chem_No.', 'Study_No.', 'Cas_No.', 'Chemical Name', and 'MOL File', each with a corresponding text input field. An 'Add' button is at the bottom left. On the right, the 'Conditions' table is empty, with columns 'No.', 'Type', and 'Conditions'. Below the table are 'Clear', 'Delete', and a dropdown menu buttons.

Search Results | Search Conditions

Please set the search conditions.

Chemical | Histopathology | Measured Data

☒ Chem_No.

☒ Study_No.

☒ Cas_No.

☒ Chemical Name

☒ MOL File

...

Add

Conditions

No.	Type	Conditions
-----	------	------------

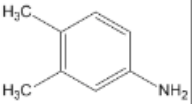
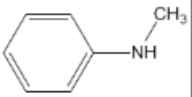
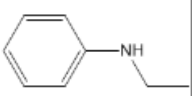
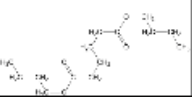
Clear Delete

検索結果画面

Search Results Search Conditions

Results : 510

Select All Cancel All Add to Study_View Delete from Study_View

	Chem...	Chemical Data	Structure	Study Lin...	Adme...	Mech...	No.	Type	Conditions
<input type="checkbox"/>	1	[Cas_No.] 95-64-7 [Name] 3,4-xylidine		1<28>	1[7]	1[2]			
<input type="checkbox"/>	2	[Cas_No.] 100-61-8 [Name] N-methylaniline		2<28>	2[53]	2[3]			
<input type="checkbox"/>	3	[Cas_No.] 103-69-5 [Name] Aniline, N-ethyl-		3<28>	3[1]	3[2]			
<input type="checkbox"/>	4	[Cas_No.] 105-99-7 [Name] Dibutyladinate		4<28>	4[7]				

スクロール

Searched Conditions

物質名称による検索 (1/6)

- 2,5-dimethylanilineの試験結果を検索したい場合

The screenshot shows the 'Main [HessDB_Search]' window. The 'Search Conditions' tab is active. Under the 'Chemical' sub-tab, the following search criteria are checked and entered:

- ☒ Chem_No. (empty text box)
- ☒ Study_No. (empty text box)
- ☒ Cas_No. (empty text box)
- ☒ Chemical Name: 2,5-dimethylaniline (with a red '入力' label pointing to the text)
- ☒ MOL File (empty text box)

A red arrow labeled 'クリック' (Click) points to the 'Add' button at the bottom left of the search conditions panel. To the right, the 'Conditions' table is empty, with columns 'No.', 'Type', and 'Conditions'. At the bottom right of the window are 'Clear', a dropdown menu, and 'Delete' buttons.

物質名称による検索 (2/6)

Main [HessDB_Search]

Open View Save View Study_View Adme_View Mechanism_View List Help

Search Results Search Conditions

Please set the search conditions.

Chemical Histopathology Measured Data

☒ Chem_No.

☒ Study_No.

☒ Cas_No.

☒ Chemical Name 2,5-dimethylaniline

☒ MOL File

...

Add

クリック → Search

Conditions

No.	Type	Conditions
1	Chemical Name	2,5-dimethylaniline

設定した検索条件

Clear 1 Delete

物質名称による検索 (3/6)

The screenshot shows the 'Main [HessDB_Search]' window. The 'Search Results' tab is active. A red arrow points to the 'Results : 0' label. The main display area contains the text:
ヒット0。
必要に応じて関連情報の収集を試す。

Buttons at the top include: Search, Select All, Cancel All, Add to Study_View, and Delete from Study_View.

No.	Type	Conditions
1	Chemical Name	2,5-dimethylaniline

Searched Conditions

物質名称による検索 (4/6)

Search Results Search Conditions

Please set the search conditions.

Chemical Histopathology Measured Data

☒ Chem_No.

☒ Study_No.

☒ Cas_No.

☒ Chemical Name 2,5-dimethylaniline

☒ MOL File

...

Conditions

No.	Type	Conditions
1	Chemical Name	2,5-dimethylaniline

Add

Clear

1

Delete

検索条件のクリア

物質名称による検索 (5/6)

Main [HessDB_Search]

Open View Save View Study_View Adme_View Mechanism_View List Help

Search Results Search Conditions

Please set the search conditions.

Chemical Histopathology Measured Data

☒ Chem_No.

☒ Study_No.

☒ Cas_No.

☒ Chemical Name **入力**

☒ MOL File

"dimethylaniline"を名称にもつ物質を検索

クリック → **Add**

クリック → **Search**

Conditions

No.	Type	Conditions
-----	------	------------

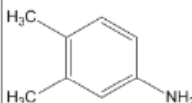
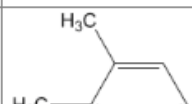
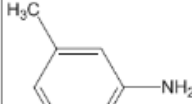
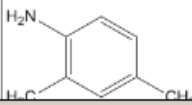
Clear Delete

物質名称による検索 (6/6)

Search Results Search Conditions

Results : 6

Select All Cancel All Add to Study_View Delete from Study_View

Chem...	Chemical Data	Structure	Study Lin...	Adme...	Mech...
<input type="checkbox"/> 1	[Cas_No.] 95-64-7 [Name] 3,4-xylidine		1<28>	1[7]	1[2]
<input type="checkbox"/> 47	[Cas_No.] 87-59-2 [Name] 2,3-xylidine		48<28*>	47[1]	47[1]
<input type="checkbox"/> 53	[Cas_No.] 108-69-0 [Name] 3,5-xylidine		54<28*>	53[6]	53[3]
<input type="checkbox"/> 157	[Cas_No.] 95-68-1 [Name]		156<28>	157[1]	

異性体がヒット

No.	Type	Conditions
1	Chemical Name	*dimethylaniline

Searched Conditions

物質情報の閲覧

クリック

複数の物質名称が登録されている

The screenshot displays the HessDB_Search application interface. The main window shows search results for '3,4-xylidine' (Chemical No. 1). A red box highlights the first result, and a red arrow points to the 'Chemical' window. The 'Chemical' window shows detailed information for 3,4-xylidine, including its chemical structure and various names (CHIRP, EINECS, TSCA, OECD HPV, Synonym 1, Synonym 2). The 'Synonym 1' and 'Synonym 2' fields are highlighted with a red box, indicating multiple names are registered for this chemical.

Search Results Table:

Chem...	Chemical Data	Structure	Study Lin...	Adme...	Mech...
1	[Cas.No.] 95-64-7 [Name] 3,4-xylidine		1<28>	1[7]	1[2]
47	[Cas.No.] 87-59-2 [Name] 3,4-xylidine		48<28*>	47[1]	47[1]
			54<28*>	53[6]	53[3]
			156<28>	157[1]	

Chemical Information Table:

General Information	
Chem.No.	1
CAS.No.	95-64-7
Name (CHIRP)	3,4-xylidine
Name (EINECS)	3,4-xylidine
Name (TSCA)	Benzenamine, 3,4-dimethyl-
Name (OECD HPV)	-
Synonym 1	3,4-Dimethylaniline
Synonym 2	4-Amino-1,2-dimethylbenzene
Usage	Intermediate for dyes and pigments; intermediate for vitamin B2
CSCL class	Type III Monitoring

Physical Chemical Properties Table:

Physical Chemical Properties	
Molecular weight	121.18
Formula	C8H11N
Melting point (°C)	51°C
Boiling point (°C)	228°C
Water solubility	3.8g/L (22°C)
Vapor pressure	4 Pa (25°C)
Specific gravit/density	1.076g/cm3 (18°C)
logKow(est)	2.17
logKow(exp)	1.84

部分構造による検索 (1/4)

The screenshot shows the 'Main [HessDB_Search]' window. The 'Search Conditions' tab is active. Under the 'Chemical' sub-tab, five search criteria are listed with checkboxes: 'Chem_No.', 'Study_No.', 'Cas_No.', 'Chemical Name', and 'MOL File'. Each criterion has a corresponding text input field. A red arrow points to a button with three dots (...) located below the input fields, with the Japanese text 'クリック' (Click) next to it. To the right, the 'Conditions' table is empty, with headers 'No.', 'Type', and 'Conditions'. At the bottom left is an 'Add' button, and at the bottom right are 'Clear', a dropdown menu, and a 'Delete' button.

Search Results | Search Conditions

Please set the search conditions.

Chemical | Histopathology | Measured Data

☒ Chem_No.

☒ Study_No.

☒ Cas_No.

☒ Chemical Name

☒ MOL File

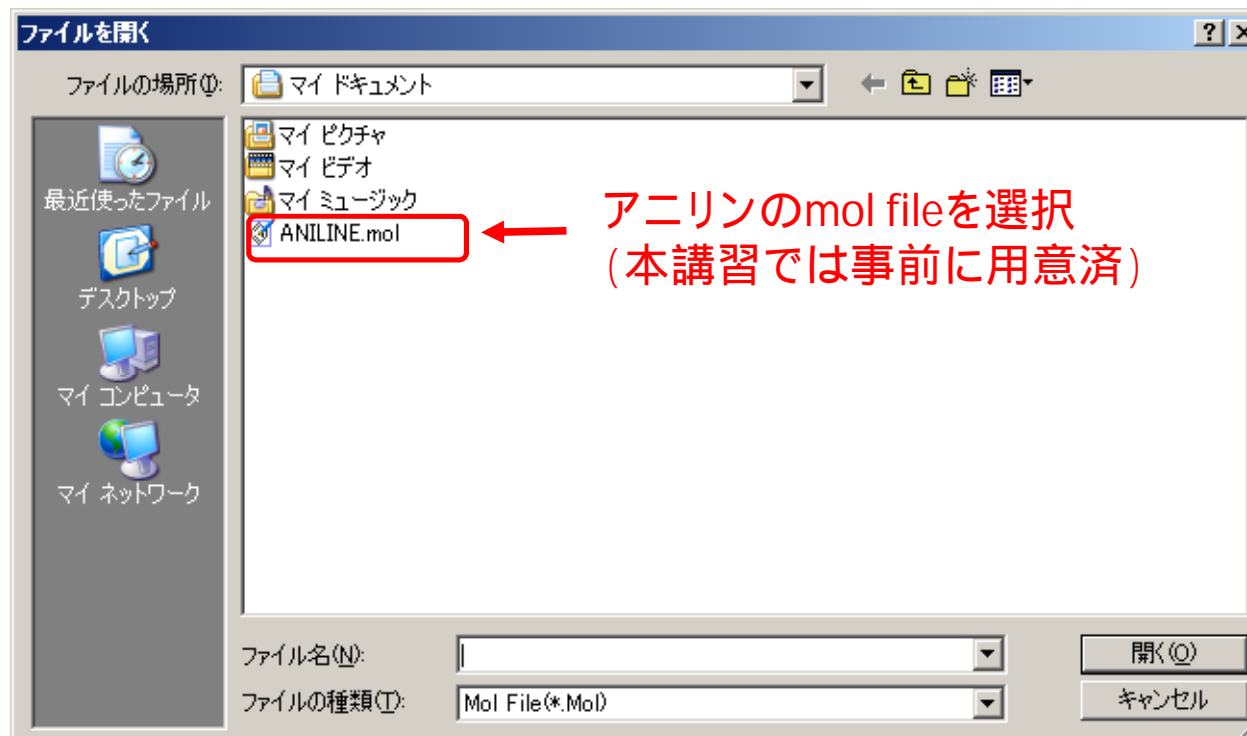
クリック →

Conditions

No.	Type	Conditions
-----	------	------------

Add Clear Delete

部分構造による検索 (2/4)



部分構造による検索 (3/4)

Main [HessDB_Search]

Open View Save View Study_View Adme_View Mechanism_View List Help

Search Results Search Conditions

Please set the search conditions.

Chemical Histopathology Measured Data

☒ Chem_No.

☒ Study_No.

☒ Cas_No.

☒ Chemical Name

☒ MOL File C:\Documents and Settings\YTNH0910\デスクトップ\ANILINE.mol

...

Click → **Search**

Click ↓ **Add**

Conditions

No.	Type	Conditions
1	Mol File	C:\Documents and Settings\YTNH0910\デスクトップ\ANILINE.mol

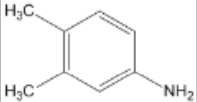
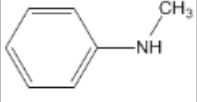
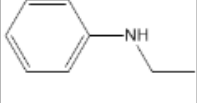
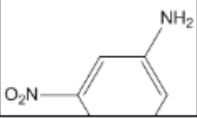
Clear 1 Delete

部分構造による検索 (4/4)

Search Results Search Conditions

Results : 113

Select All Cancel All Add to Study_View Delete from Study_View

Chem...	Chemical Data	Structure	Study Lin...	Adme...	Mech...
<input type="checkbox"/> 1	[Cas_No.] 95-64-7 [Name] 3,4-xylidine		1<28>	1[7]	1[2]
<input type="checkbox"/> 2	[Cas_No.] 100-61-8 [Name] N-methylaniline		2<28>	2[53]	2[3]
<input type="checkbox"/> 3	[Cas_No.] 103-69-5 [Name] Aniline, N-ethyl-		3<28>	3[1]	3[2]
<input type="checkbox"/> 5	[Cas_No.] 99-09-2 [Name] 3-Nitroaniline		5<28*>	5[11]	5[2]

No. Type Conditions

1 Mol File C:\Documents and Settings\YTNH0910\デスクトップ\ANILINE.mol

アニリンの部分構造を持つ物質がヒット

Searched Conditions

病理所見による検索 (1/8)

- 肝臓の胆管増生を引き起こす化合物を検索する場合

The screenshot shows the HessDB_Search application window. The title bar reads "Main [HessDB_Search]". The menu bar includes "Open View", "Save View", "Study_View", "Adme_View", "Mechanism_View", "List", and "Help". A "Search" button is in the top right. Below the menu bar are tabs for "Search Results" and "Search Conditions", with the latter being active. A message "Please set the search conditions." is displayed. Underneath are three tabs: "Chemical", "Histopathology" (which is selected and highlighted with a blue box), and "Measured Data". The "Histopathology" tab contains a list of organ systems with expandable icons: Digestive system, Immune system, Respiratory system, Urinary system, Endocrine system, Reproductive system, Hematopoietic system, Cardiovascular system, Nervous system, Eye, Skeletal, Muscle & Skin, and Others. A blue text annotation "タブを選択" (Select tab) points to the "Histopathology" tab. Below the list is a "Finding:" label and a "(All,Dead)" dropdown. Further down are checkboxes for "Difference Check", "Signif", "F1", and "F3", followed by an "Add" button. On the right side of the window is a "Conditions" section with a table header: "No.", "Type", and "Conditions". Below the header is a large empty table area. At the bottom right are "Clear", a dropdown menu, and a "Delete" button.

Search Results | Search Conditions

Please set the search conditions.

Chemical | **Histopathology** | Measured Data

タブを選択

- + Digestive system
- + Immune system
- + Respiratory system
- + Urinary system
- + Endocrine system
- + Reproductive system
- + Hematopoietic system
- + Cardiovascular system
- + Nervous system
- + Eye, Skeletal, Muscle & Skin
- + Others

Finding : (All,Dead)

Difference Check ☐ Signif ☐ F1 ☐ F3

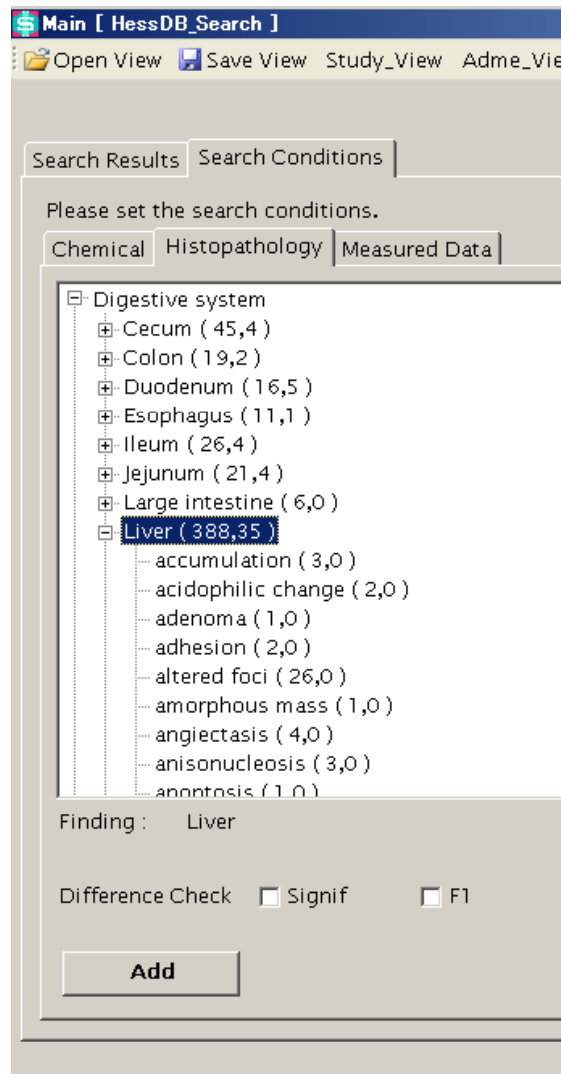
Add

Conditions

No.	Type	Conditions
-----	------	------------

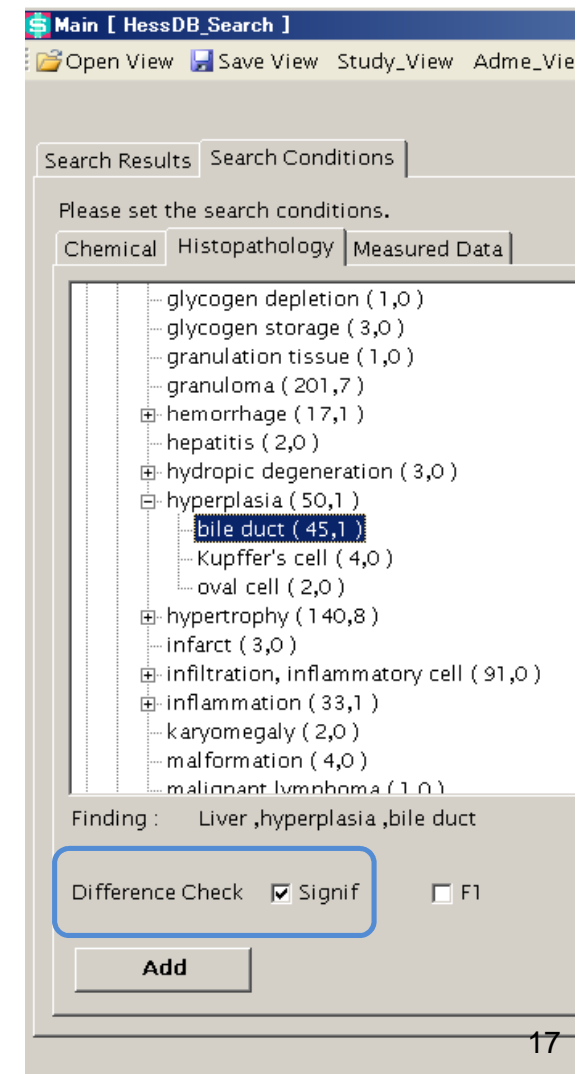
Clear [dropdown] Delete

病理所見による検索 (2/8)



Digestive system,
Liverを選択し(左)、

Hyperplasia, bile duct
を選択する(右)。
そしてsignif.にチェッ
クを入れる(右下)。



病理所見による検索 (3/8)

Main [HessDB_Search]

Open View Save View Study_View Adme_View Mechanism_View List Help

Search

Search Results Search Conditions

Please set the search conditions.

Chemical Histopathology Measured Data

glycogen depletion (1,0)
glycogen storage (3,0)
granulation tissue (1,0)
granuloma (201,7)
+ hemorrhage (17,1)
hepatitis (2,0)
+ hydropic degeneration (3,0)
+ hyperplasia (50,1)
 bile duct (45,1)
 Kupffer's cell (4,0)
 oval cell (2,0)
+ hypertrophy (140,8)
infarct (3,0)
+ infiltration, inflammatory cell (91,0)
+ inflammation (33,1)
karyomegaly (2,0)
malformation (4,0)
malignant lymphoma (1,0)

Finding : Liver ,hyperplasia ,bile duct (All,Dead)

Difference Check ☒ Signif ☐ F1 ☐ F3

Add

クリック

Conditions

No.	Type	Conditions
1	Histopathol	[Finding] Liver ,hyperplasia ,bile duct [Difference check] Signif

Clear 1 Delete

クリック

病理所見による検索 (4/8)

Main [HessDB_Search]

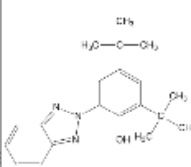
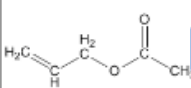
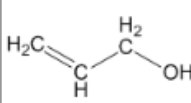
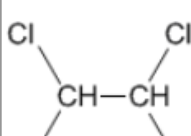
Open View Save View Study_View Adme_View Mechanism_View List Help

Search

Search Results Search Conditions

Results : 11

Select All Cancel All Add to Study_View Delete from Study_View

Chem...	Chemical Data	Structure	Study Lin...	Adme...	Mech...
<input type="checkbox"/> 110	[Cas_No.] 3846-71-7 [Name] Phenol, 2-(2H-benzotriaz-2-yl)		111<28>	110[2]	110[1]
<input type="checkbox"/> 304	[Cas_No.] 591-87-7 [Name] Allyl acetate		318<91*>	304[1]	304[1]
<input type="checkbox"/> 305	[Cas_No.] 107-18-6 [Name] 2-Propen-1-ol		319<91*>	305[1]	305[8]
<input type="checkbox"/> 307	[Cas_No.] 79-34-5 [Name] Ethane,		321<91*>	307[1]	307[6]

クリック

No.	Type	Conditions
1	Histopathol	[Finding] Liver ,hyperplasia ,bile duct [Difference check] Signif

Searched Conditions

病理所見による検索 (5/8)

- 試験結果の要約画面

Study HessDB_Search

Chem_No. 304

Chemical Data [Cas_No.] 591-87-7 [Name] Allyl acetate

Study Link ID

318<91*>

Test Result

Test Method

Measured Data

Data

Study_No. 318

	Hematology	Blood Chemistry	Absolute organ...	Relative organ ...	Necropsy(Survi...	Necropsy(Dead)	Histopathology(...	Histopathology(...
Male	[WBC]:A25 Δ A50 Δ [Plt]:A25 Δ A50 Δ	[BA]:A25 Δ A50 Δ [ALB]:A25 ▽ A50 ▽ [ALT(GPT)]:A50 Δ [ALP]:A50 ▽ [SDH]:A50 Δ	[Body Weight]:A50 ▽	N/A	-		[Intestine large, colon]Epithelium, necrosis:A100 Δ [Intestine large, rectum]Epithelium, hemorrhage:A100	-
Female	[RBC]:A50 Δ [HCT(PCV)]:A50 ▽ [HGB]:A50 ▽ [RET]:A50 Δ [Plt]:A50 Δ [Nucleated	[TP]:A12 ▽ A25 ▽ A50 ▽ [BA]:A50 Δ [ALB]:A12 ▽ A25 ▽ A50 ▽ [ALT(GPT)]:A50 Δ [SDH]:A50 Δ	N/A	N/A	-		[Liver]Hemorrhage:A Δ [Liver]Mineralization Δ [Liver]Pigmentation, hemosiderin:A25 Δ	-

Descriptive Data

General behavior	FOB	Urinalysis
Male:A100:Dead Pallor and eye or nasal discharge Ruffled fur Lethargy	Male:- Female:-	Male:- Female:-
Body weight	Food consumption	Water consumption
Male:A12:1 A50:1 ● Female:N/A	Male:- Female:-	Male:- Female:-

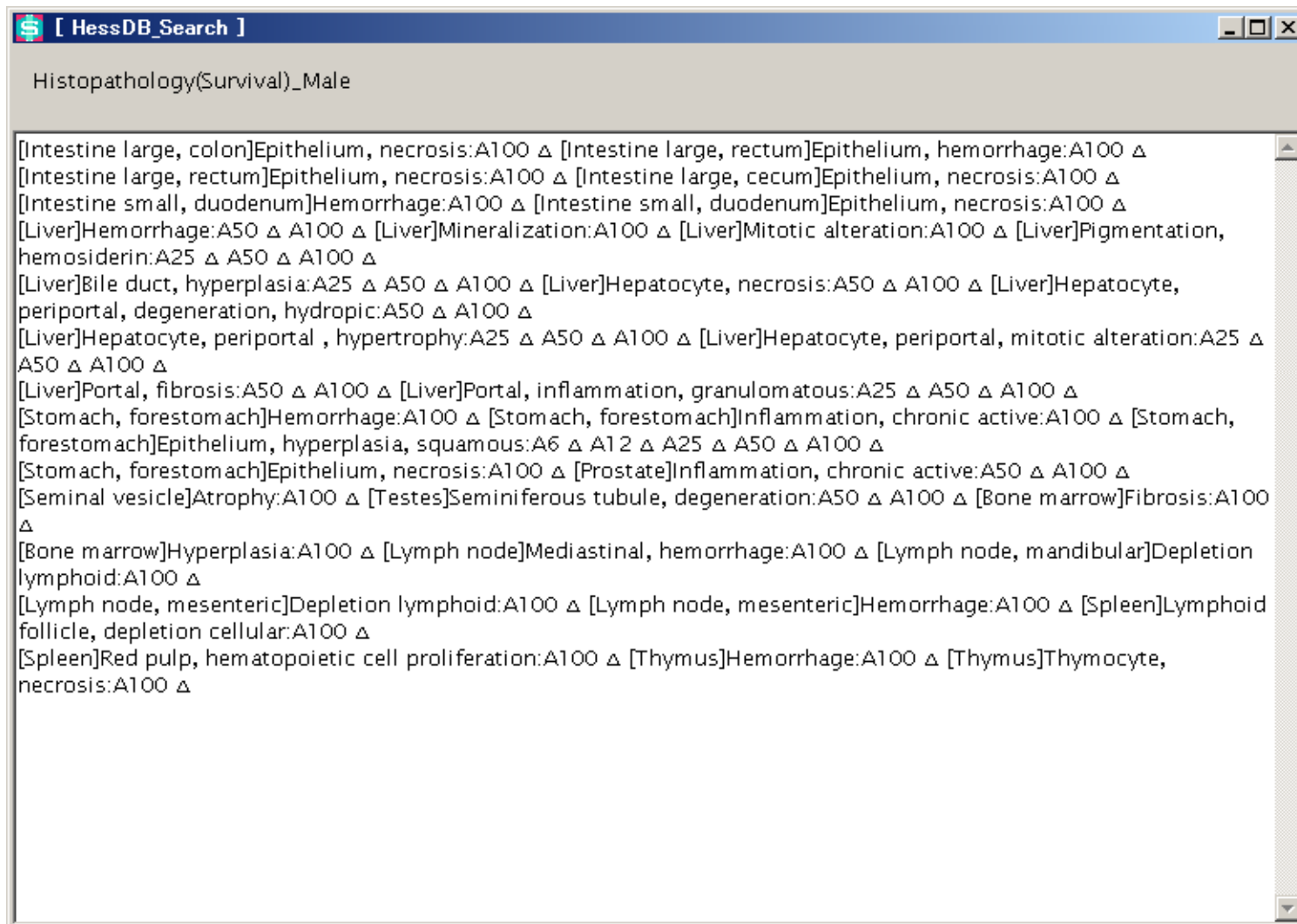
Toxicological index

	NOEL	NOEL	LOEL	LOEL
Male	<6 mg/kg/day	-	-	-
Female	<6 mg/kg/day	-	-	-

右クリック
↓
Pop up this cell
を選択

20

病理所見による検索 (6/8)



病理所見による検索 (7/8)

- 病理所見の画面

Study [HessDB_Search]

Chem_No. 304 Chemical Data [Cas_No.] 591-87-7 [Name] Allyl acetate

Study Link ID 318<91*>

Test Result Test Method Measured Data

Test Item Histo(Survival)_Male Actual

Comment The animals which died before the end of the study were counted in the 100mg/kg dose group (all of them died).

DOSE		mg/kg	Admin...														
Organ	Finding		0					6					12				
			count	sig...	F1	F2	F3	count	sig...	F1	F2	F3	count	sig...	F1	F2	
Intestine large, colon	Inflammation, chronic active	Total	0/10														
		±															
		+															
		++															
		+++															
		++++															
		TorP															
Intestine large, colon	Epithelium, necrosis	Total	0/10														
		±															
		+															
		++															
		+++															
		++++															
		TorP															
Intestine large, rectum	Inflammation, chronic active	Total	0/10														
		±															
		+															
		++															
		+++															
		++++															
		TorP															
Intestine large, rectum	Epithelium, hemorrhage	Total	0/10														
		+															

スクロール

22

病理所見による検索 (8/8)

Study [HessDB_Search]

Chem_No. 304 Chemical Data [Cas_No.] 591-87-7 [Name] Allyl acetate

Study Link ID 318<91*>

Test Result Test Method Measured Data

Test Item Histo(Survival)_Male Actual

Comment The animals which died before the end of the study were counted in the 100mg/kg dose group (all of them died).

DOSE	mg/kg	25	50	100
Organ	Finding	count sig... F1 F2 F3	count sig... F1 F2 F3	count sig... F1 F2
	+			
	++			
	+++			
	++++			
	TorP			
Liver	Bile duct, hyperplasia	1/10 (... Δ)	9/10 (... ** Δ)	10/10... ** Δ
	±			
	+			
	++			
	+++			
	++++			
	TorP			
Liver	Hepatocyte, necrosis	0/10	4/10 (... * Δ)	10/10... ** Δ
	±			
	+			
	++			
	+++			
	++++			
	TorP			
Liver	Hepatocyte, vacuolization cytoplasmic	5/10 (...)	6/10 (...)	0/10
	±			
	+			
	++			

有意差

フラグ

フラグ

23

検査数値による検索 (1/3)

Main [HessDB_Search]

Open View Save View Study_View Adme_View Mechanism_View List Help

Search

Search Results Search Conditions

Please set the search conditions.

Chemical Histopathology **Measured Data** タブを選択

Test Item Hematology

Group ☒ All ☐ Administration ☐ Recovery

Sex ☒ All ☐ Male ☐ Female

Search Keyword RBC ≤ %

Difference ☐ Signif (mg/kg/day ppm)

☐ F (mg/kg/day ppm)

Add

Conditions

No.	Type	Conditions
-----	------	------------

Clear Delete

検査数値による検索 (2/3)

- RBC, HCT, HGB が90%以下に減少した物質を検索する場合

Main [HessDB_Search]

Open View Save View Study_View Adme_View Mechanism_View List Help

クリック

Search Results Search Conditions

Please set the search conditions.

Chemical Histopathology Measured Data

Test Item

Group ☒ All ☐ Administration ☐ Recovery

Sex ☒ All ☐ Male ☐ Female

Search Keyword

Difference ☐ Signif (mg/kg/day ppm)

☐ F (mg/kg/day ppm)

クリック

Conditions

No.	Type	Conditions
1	Test Item	[Test Item] Hematology [Group]All [Sex]All [Search Keyword]RBC ≤ % 90 [Difference]
2	Test Item	[Test Item] Hematology [Group]All [Sex]All [Search Keyword]HCT(PCV) ≤ % 90 [Difference]
3	Test Item	[Test Item] Hematology [Group]All [Sex]All [Search Keyword]HGB ≤ % 90 [Difference]

Clear Delete

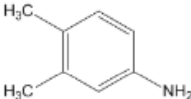
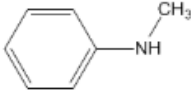
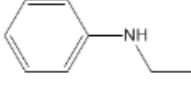
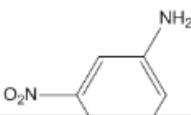
RBC, HCT, HGBを選択、"90"を入力。

検査数値による検索 (3/3)

Search Results | Search Conditions

Results : 55

Select All Cancel All Add to Study_View Delete from Study_View

Chem...	Chemical Data	Structure	Study Lin...	Adme...	Mech...
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<input type="checkbox"/> 2	[Cas_No.] 100-61-8 [Name] N-methylaniline		2<28>	2[53]	2[3]
<input type="checkbox"/> 3	[Cas_No.] 103-69-5 [Name] Aniline, N-ethyl-		3<28>	3[1]	3[2]
<input type="checkbox"/> 5	[Cas_No.] 99-09-2 [Name] 3-Nitroaniline		5<28*>	5[11]	5[2]

No.	Type	Conditions
1	Test Item	[Test Item] Hematology [Group]All [Sex]All [Search Keyword]RBC ≤ % 90 [Difference]
2	Test Item	[Test Item] Hematology [Group]All [Sex]All [Search Keyword]HCT(PCV) ≤ % 90 [Difference]
3	Test Item	[Test Item] Hematology [Group]All [Sex]All [Search Keyword]HGB ≤ % 90 [Difference]

Searched Conditions

データの閲覧 (1/10)

Main [HessDB_Search]

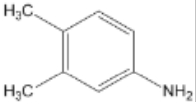
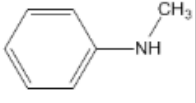
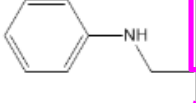
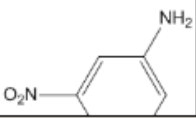
Open View Save View Study_View Adme_View Mechanism_View List Help

Search

Search Results Search Conditions

Results : 55

Select All Cancel All Add to Study_View Delete from Study_View

Chem...	Chemical Data	Structure	Study Lin...	Adme...	Mech...
<input type="checkbox"/> 1	[Cas_No.] 95-64-7 [Name] 3,4-xylidine		1<28>	1[7]	1[2]
<input type="checkbox"/> 2	[Cas_No.] 100-61-8 [Name] N-methylaniline		2<28>	2[53]	2[3]
<input type="checkbox"/> 3	[Cas_No.] 103-69-5 [Name] Aniline, N-ethyl-		3<28>	3[1]	3[2]
<input type="checkbox"/> 5	[Cas_No.] 99-09-2 [Name] 3-Nitroaniline		5<28*>	5[11]	5[2]

クリック

No.	Type	Conditions
1	Test Item	[Test Item] Hematology [Group]All [Sex]All [Search Keyword]RBC ≤ % 90 [Difference]
2	Test Item	[Test Item] Hematology [Group]All [Sex]All [Search Keyword]HCT(PCV) ≤ % 90 [Difference]
3	Test Item	[Test Item] Hematology [Group]All [Sex]All [Search Keyword]HGB ≤ % 90 [Difference]

Searched Conditions

データの閲覧 (2/10)

- 試験報告書データ

Study [HessDB_Search]

Chem_No. 3
Chemical Data [Cas_No.] 103-69-5 [Name] Aniline, N-ethyl-

Test Result
Test Method
Measured Data

Study Link ID
3 <28>

Study_No. 3

	Hematology	Blood Chemistry	Absolute organ...	Relative organ ...	Necropsy(Survi...	Necropsy(Dead)	Histopathology(...	Histopathology(...
Male	[RBC]:A5 ▽ A25 ▽ A125 ▽ [HCT(PCV)]:A25 ▽ A125 ▽ [HGB]:A25 ▽ A125 ▽ [MCV]:A125 ▽	[T-BIL]:A125 ▽ [K]:A25 ▽ A125 ▽	[Body Weight]:A125 ▽ [Spleen]:A25 ▽ A125 ▽	[Body Weight]:A125 ▽ [Spleen]:A25 ▽ A125 ▽	N/A	-	[Liver]Hemosiderosi in Kupffer cell:A125 ▽ R125 ▽ [Liver]Extramedullar erythropoiesis:A125 ▽	-
Female	[RBC]:A5 ▽ A25 ▽ A125 ▽ [HCT(PCV)]:A5 ▽ A25 ▽ A125 ▽ [HGB]:A5 ▽ A25 ▽ A125 ▽ [MCV]:A25 ▽	[T-BIL]:A125 ▽ [K]:A125 ▽	[Body Weight]:A125 ▽ [Spleen]:A125 ▽	[Body Weight]:A125 ▽ [Spleen]:A125 ▽	N/A	-	[Liver]Hemosiderosi in Kupffer cell:A25 ▽ A125 ▽ R125 ▽ [Liver]Extramedullar erythropoiesis:A125 ▽	-

Descriptive Data

General behavior	FOB	Urinalysis
Male:A125:Cyanosis, Colored(Brown) eye ball, Pale skin Female:A125:Cyanosis, Colored(Brown) eye ball,	Male:- Female:-	Male:A125:Colored(Brown) Female:A125:Colored(Brown)
Body weight	Food consumption	Water consumption
Male:A125:1● Female:A125:1●	Male:A125:1● Female:A125:1●	Male:- Female:-

Toxicological index

	NOEL	NOEL	LOEL	LOAEL
Male	1 mg/kg/d	-	-	-
Female	1 mg/kg/d	-	-	-

●:F1 ◆:F3

データの閲覧 (3/10)

- 試験報告書データ

Study [HessDB_Search]

Chem.No. 3 Chemical Data [Cas.No.] 103-69-5 [Name] Aniline, N-ethyl-

Study Link ID 3<28>

Test Result Test Method Measured Data

Basic Information of study

Study_No.	3	Study type	Repeat dose oral toxicity test		
GLP	CSCL	Test guideline	CSCL, OECD TG 407		
Administration period	28	Recovery period	14	Year reported	1994
Start (year)	1993	End (year)	1993	Test facility	Research Institute for Animal

Information of test animals

Species	Rats	
Strain	CD(SD)	
Supplier	CHARLES RIVER LABORATORIES JAPAN, INC.	
Age at first administration	male	5
	female	5

Test Substance Information

Test substance	N-Ethylaniline				
Manufacturer	Mitubosi Chemical Co., Ltd.				
Lot No.	A-J	Purity (%)	99.6	External appearance	Liquid
Impurities	0.37% Diethyl aniline, 0.02% aniline				
Stability	Stable for 511 days at 4°C, airtight, in dark place. Stable during dosing period in cool (4°C) and dark place.				

Animal room environment

Barrier	Barrier
Temperature (°C)	19-25
Relative humidity (%)	45-65
Ventilation (time/hour)	≥10
Lighting (hrs/day)	12
Animals per cage	1
Diet	Labo MR Stock / Nosan Co.
Feeding	ad libitum
Watering	ad libitum

Information of administration

Route (method)	Oral (Gavage)	Dose levels	0, 1, 5, 25, 125 mg/kg		
Frequency/Week	7	Dose volume(ml/kg)	3	Vehicle	Sesame oil
Stability and homogeneity	Stability: 99.6%/before, 99.6%/after				
Dose selection	The LD50 of for acute oral toxicity using rats of n-Eethylaniline was determined to be 382 mg/kg for males rats and 553 mg/kg for female rats. The dosage of the examination was set for a 14- days preliminary oral toxicity examination (dose levels: 0, 3, 10, 30, and 100 mg/kg of test substance; 4 males				
Note	None				

Others

Statistical analysis	Quantitative values: Bartlett's test, ANOVA, Dunnett's multiple comparison test, Student's t- test, Kruskal-Wallis test, nonparametric type Dunnett's multiple comparison test, Aspin-Welch's t test.	Note	-
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29

データの閲覧 (4/10)

- 試験報告書データ

Study Link ID: 3<28>

Chem.No. 3 Chemical Data [Cas.No.] 103-69-5 [Name] Aniline, N-ethyl-

Test Result | Test Method | **Measured Data**

Test Item: Hematology_Male Actual:

Comment:

		Admin...																					
		mg/kg		0		1		5		25		125											
Experiment number		6		6		6		6		6		6											
		mean	SD	si...	F1	F3	mean	SD	si...	F1	F3	mean	SD	si...	F1	F3	mean						
RBC	10 ⁴ /μL	775	31				748	30				724	37	*	▽		670	27	**	▽		467	
HCT(PCV)	%	44.0	1.8				42.8	1.3				42.0	1.1				40.0	1	**	▽		41.8	
HGB	g/dL	15.5	0.6				15.1	0.7				14.7	0.4				13.8	0.5	**	▽		12.3	
MCV	fL	57	1				57	1				58	2				60	1				90	
MCH	pg	20.0	0.4				20.2	0.5				20.4	1.1				20.7	0.6				26.4	
MCHC	%	35.2	0.6				35.2	0.6				35.1	0.8				34.5	0.7				29.5	
Met-Hgb	%	0.5	0.3				0.7	0.1				0.7	0.3				1.6	0.4	*	Δ		4.7	
Heinz	‰	0	0				0	0				0	0				17	12				237	
WBC	10 ² /μL	77	11				84	44				72	17				72	17				66	
LEUCO%	NEUT																						
LEUCO%	STAB	%	0	0			0	0				0	0				0	0				1	
LEUCO%	SEG	%	10	3			14	6				13	4				14	4				18	
LEUCO%	LYMPH	%	88	4			83	7				86	4				84	4				80	
LEUCO%	MONO	%	1	1			2	1				1	1				1	1				1	
LEUCO%	EOSN	%	1	1			1	1				1	1				1	1				0	
LEUCO%	BASO	%	0	0			0	0				0	0				0	0				0	
LEUCO%	LUC																						
LEUCO%	OTHERS	%	0	0			0	0				0	0				0	0				0	
E-Blast																							
RET	‰	39	11				45	14				45	12				96	3	*	Δ		451	
Plt	10 ⁴ /μL	142	14				151	18				156	8				157	16				110	
CT																							

データの閲覧 (5/10)

- 毒性作用機序情報

Main [HessDB_Search]

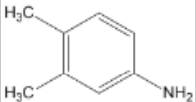
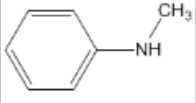
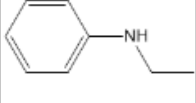
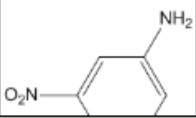
Open View Save View Study_View Adme_View Mechanism_View List Help

Search

Search Results Search Conditions

Results : 55

Select All Cancel All Add to Study_View Delete from Study_View

Chem...	Chemical Data	Structure	Study Lin...	Adme...	Mech...
<input type="checkbox"/> 1	[Cas_No.] 95-64-7 [Name] 3,4-xylidine		1<28>	1[7]	1[2]
<input type="checkbox"/> 2	[Cas_No.] 100-61-8 [Name] N-methylaniline		2<28>	2[53]	2[3]
<input type="checkbox"/> 3	[Cas_No.] 103-69-5 [Name] Aniline, N-ethyl-		3<28>	3[1]	3[2]
<input type="checkbox"/> 5	[Cas_No.] 99-09-2 [Name] 3-Nitroaniline		5<28>	5[11]	5[2]

No.	Type	Conditions
1	Test Item	[Test Item] Hematology [Group]All [Sex]All [Search Keyword]RBC ≤ % 90 [Difference]
2	Test Item	[Test Item] Hematology [Group]All [Sex]All [Search Keyword]HCT(PCV) ≤ % 90 [Difference]
3	Test Item	[Test Item] Hematology [Group]All [Sex]All [Search Keyword]HGB ≤ % 90 [Difference]

クリック

Searched Conditions

データの閲覧 (6/10)

- 毒性作用機序情報

Mechanism_List [HessDB_Search]

Chem_No. 3

Chemical Data [Cas.No.] 103-69-5 [Name] Aniline, N-ethyl-

Mechanism Link ID 3[2]

Summary of Mechanistic Information

Chemical Structure: CCNC1=CC=CC=C1

クリック→毒性作用機序要約へ

クリック→詳細情報へ

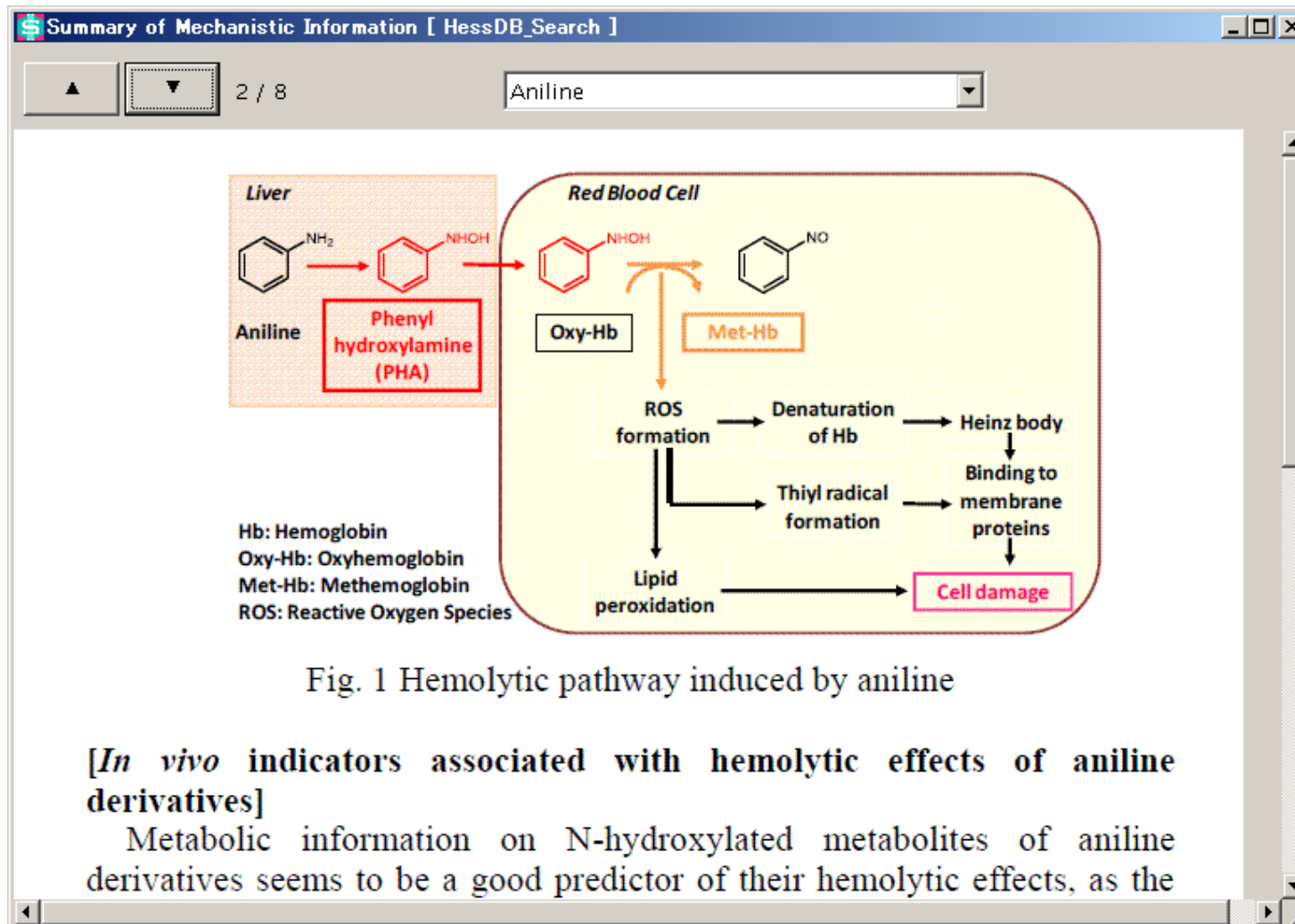
Link Data : 2

	viewID	Reference	Key Words	Summary
<input type="checkbox"/>	3-1	Nomura A Studies on sulfhemoglobin formation by various drugs (2). Folia pharmacol japon 1977; May;73:423-435. PMID: 908543	Erythrocyte; Met-Hb formation; in vivo	Met-Hb was formed 10 to 30 min after the single i.p. dosing of N-ethylamine to mice without sulfhemoglobin formation. Sulfhemoglobin was formed at 48 h after the repeated dosing of N-ethylamine without Met-Hb
<input type="checkbox"/>	3-2	Beyerbach A., Sabbioni G. Biomonitoring of arylamines: haemoglobin adducts of aniline derivatives. Biomarkers 1999; 4(3):229-236.	Erythrocyte; Covalent binding to hemoglobin; in vivo	Hemoglobin adducts were observed after administration of N-ethylaniline to rats. The hemoglobin binding index was 45 ± 5.

Add to Mechanism_View

データの閲覧 (7/10)

- 毒性作用機序要約



データの閲覧 (8/10)

- ADME情報

Main [HessDB_Search]

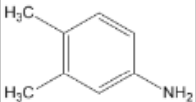
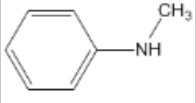
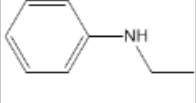
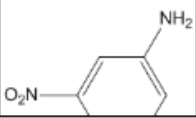
Open View Save View Study_View Adme_View Mechanism_View List Help

Search

Search Results Search Conditions

Results : 55

Select All Cancel All Add to Study_View Delete from Study_View

	Chem...	Chemical Data	Structure	Study Lin...	Adme...	Mech...
<input type="checkbox"/>	1	[Cas_No.] 95-64-7 [Name] 3,4-xylidine		1<28>	1[7]	1[2]
<input type="checkbox"/>	2	[Cas_No.] 100-61-8 [Name] N-methylaniline		2<28>	2[53]	2[3]
<input type="checkbox"/>	3	[Cas_No.] 103-69-5 [Name] Aniline, N-ethyl-		3<28>	3[1]	3[2]
<input type="checkbox"/>	5	[Cas_No.] 99-09-2 [Name] 3-Nitroaniline		5<28*>	5[11]	5[2]

クリック

No.	Type	Conditions
1	Test Item	[Test Item] Hematology [Group]All [Sex]All [Search Keyword]RBC ≤ % 90 [Difference]
2	Test Item	[Test Item] Hematology [Group]All [Sex]All [Search Keyword]HCT(PCV) ≤ % 90 [Difference]
3	Test Item	[Test Item] Hematology [Group]All [Sex]All [Search Keyword]HGB ≤ % 90 [Difference]

Searched Conditions

データの閲覧 (9/10)

- 詳細データを参照したいとき

Adme_List [HessDB_Search]

Adme List | Adme Conditions

Results : 1

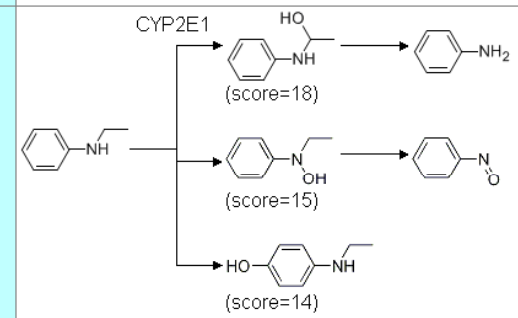
Select All Cancel All **Add to Adme_View** クリック

	Experiment ID	Chem_No.	Cas_No.	Substance	Keyword	Referenced figures and tables	Adme Link C...
<input checked="" type="checkbox"/>	3-00-00-01	3	103-69-5	N-ethylaniline	in silico prediction, Human		3

チェック

データの閲覧 (10/10)

Adme_View [HessDB_Search]			
Delete selected columns		Format Set	
Chem_No.			3
SubChem_No.			3
keyword			in silico prediction, Human
Reference	ID		3-00-00
Reference	Author		Y.Yamazoe, K. Ito, K. Yoshinari
Reference	Journal		Drug Metabolism Reviews
Reference	Volume		43
Reference	Number		4
Reference	Pages		409-439
Reference	Publication year		2011
Reference	Title		Construction of a CYP2E1 -template system for prediction of the metabolism on both site and preference order
Reference	Language		English
Reference	PubMed_Author		
Reference	PubMed_Journal		

Adme_View [HessDB_Search]			
Delete selected columns		Format Set	
Chem_No.			3
Disposition	Excretion	Summary	
Disposition	Referenced figures and tables		 <p>CYP2E1</p> <p>(score=18)</p> <p>(score=15)</p> <p>(score=14)</p>
Result of interaction,			
Relation to toxicity			
Related substances			
Remarks			The score indicates relative metabolic priority of each metabolite for same enzyme.

物質間でのデータの比較 (1/4)

- N-methylanilineとN-ethylanilineの毒性データを比較したいとき

Main [HessDB_Search]

Open View Save View Study_View Adme_View Mechanism_View List Help

Search

Search Results Search Conditions

Results : 55

Select All Cancel All **Add to Study_View** Delete from Study_View

クリック

チェック

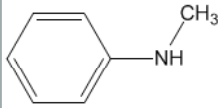
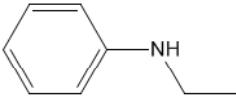
	Chem...	Chemical Data	Structure	Study Lin...	Adme...	Mech...
<input type="checkbox"/>	1	[Cas_No.] 95-64-7 [Name] 3,4-xylidine	<chem>Cc1ccc(N)cc1C</chem>	1<28>	1[7]	1[2]
<input checked="" type="checkbox"/>	2	[Cas_No.] 100-61-8 [Name] N-methylaniline	<chem>CNc1ccccc1</chem>	2<28>	2[53]	2[3]
<input checked="" type="checkbox"/>	3	[Cas_No.] 103-69-5 [Name] Aniline, N-ethyl-	<chem>CCNc1ccccc1</chem>	3<28>	3[1]	3[2]
<input type="checkbox"/>	5	[Cas_No.] 99-09-2 [Name] 3-Nitroaniline	<chem>Nc1ccc([N+](=O)[O-])cc1</chem>	5<28*>	5[11]	5[2]

No.	Type	Conditions
1	Test Item	[Test Item] Hematology [Group]All [Sex]All [Search Keyword]RBC ≤ % 90 [Difference]
2	Test Item	[Test Item] Hematology [Group]All [Sex]All [Search Keyword]HCT(PCV) ≤ % 90 [Difference]
3	Test Item	[Test Item] Hematology [Group]All [Sex]All [Search Keyword]HGB ≤ % 90 [Difference]

Searched Conditions

物質間でのデータの比較 (2/4)

クリック

Study_View [HessDB_Search]					Study_View [HessDB_Search]				
Delete selected columns		Format Set		Measured Data View	Delete selected columns		Format Set		Measured Data View
Chem_No.		2	3		Chem_No.		2	3	
Study_No.		2	3		Study_No.		2	3	
General Information	CAS No.	100-61-8	103-69-5		Descriptive Data	Urinalysis	Male:A5:Keton body1● A25:Keton body1●	Male:A125:Colored(Brown) Female:A125:Colored(Brown)	
General Information	Name	N-methylaniline	Aniline, N-ethyl-		Descriptive Data	Body weight	Male:R125:1 Female:N/A	Male:A125:1● Female:A125:1●	
General Information	Structure				Descriptive Data	Food consumption	Male:R125:1 Female:N/A	Male:A125:1● Female:A125:1●	
					Descriptive Data	Water consumption	Male:- Female:-	Male:- Female:-	
General Information	Name (EINECS)	N-methylaniline	N-ethylaniline		Data	Hematology	Male:[RBC]:A25 ▽ A125 ▽ [HCT(PCV)]:A25 ▽ A125 ▽	Male:[RBC]:A5 ▽ A25 ▽ A125 ▽ [HCT(PCV)]:A25 ▽ A125 ▽	
					Data	Blood Chemistry	Male:[CRN]:A125 Δ [T-BIL]:A125 Δ	Male:[T-BIL]:A125 Δ [K]:A25 Δ A125 Δ	
General Information	Name (TSCA)	Benzenamine, N-methyl-	Benzenamine, N-ethyl-		Data	Absolute organ weight	Male:[Spleen]:A125 Δ Female:[Spleen]:A125 Δ	Male:[Body Weight]:A125 ▽ [Spleen]:A25 Δ A125 Δ	
General Information	Name (OECD HPV)		Aniline, N-ethyl-		Data	Relative organ weight	Male:[Spleen]:A125 Δ Female:[Spleen]:A125 Δ	Male:[Body Weight]:A125 ▽ [Spleen]:A25 Δ A125 Δ	
General Information	Synonym 1	N-Methylbenzenamine	N-Ethylbenzenamine		Data	Necropsy (Survival)	Male:N/A Female:N/A	Male:N/A Female:N/A	
General Information	Synonym 2	(Methylamino)benzene	Ethylphenylamine		Data	Necropsy (Dead)	Male:- Female:-	Male:- Female:-	
General Information		organic synthetic	raw material for organic		Data	Histopathology (Survival)	Male:[bone marrow]hematopoiesis, [...]	Male:[Liver]Hemosiderosis in Kupffer cell:A125 Δ R125 Δ	
General Information					Data	Histopathology (Dead)	Male:- Female:-	Male:- Female:-	

物質間でのデータの比較 (3/4)

- RBC, HCT, HGBのデータを比較したいとき

Measured Data View (Study_View) [HessDB_Search]

Data View クリック

Other windows are locked while this window is open.

Click a checkbox to select comparing items. (Max:10)

Hematology [He]	Blood Chemistry [Bl]	Absolute organ weight [Ab]	Relative organ weight [Re]
<input checked="" type="checkbox"/> RBC	<input type="checkbox"/> BUN	<input type="checkbox"/> Body Weight	<input type="checkbox"/> Body Weight
<input checked="" type="checkbox"/> HCT(PCV)	<input type="checkbox"/> CRN	<input type="checkbox"/> Brain	<input type="checkbox"/> Brain
<input checked="" type="checkbox"/> HGB	<input type="checkbox"/> T-CHO	<input type="checkbox"/> Pituitary	<input type="checkbox"/> Pituitary
<input type="checkbox"/> MCV	<input type="checkbox"/> TG	<input type="checkbox"/> Thyroids	<input type="checkbox"/> Thyroids
<input type="checkbox"/> MCH	<input type="checkbox"/> PL	<input type="checkbox"/> Thyroids right	<input type="checkbox"/> Thyroids right
<input type="checkbox"/> MCHC	<input type="checkbox"/> T-BIL	<input type="checkbox"/> Thyroids left	<input type="checkbox"/> Thyroids left
<input type="checkbox"/> Met-Hgb	<input type="checkbox"/> GLUC	<input type="checkbox"/> Thymus	<input type="checkbox"/> Thymus
<input type="checkbox"/> Heinz	<input type="checkbox"/> TP	<input type="checkbox"/> Heart	<input type="checkbox"/> Heart
<input type="checkbox"/> WBC	<input type="checkbox"/> BA	<input type="checkbox"/> Lung	<input type="checkbox"/> Lung
<input type="checkbox"/> LEUCO% NEUT	<input type="checkbox"/> ALB	<input type="checkbox"/> Liver	<input type="checkbox"/> Liver
<input type="checkbox"/> LEUCO% STAB	<input type="checkbox"/> A/G	<input type="checkbox"/> Kidneys	<input type="checkbox"/> Kidneys
<input type="checkbox"/> LEUCO% SEG	<input type="checkbox"/> Protein % ALB	<input type="checkbox"/> Kidneys right	<input type="checkbox"/> Kidneys right
<input type="checkbox"/> LEUCO% LYMPH	<input type="checkbox"/> Protein % α1-glo	<input type="checkbox"/> Kidneys left	<input type="checkbox"/> Kidneys left
<input type="checkbox"/> LEUCO% MONO	<input type="checkbox"/> Protein % α2-glo	<input type="checkbox"/> Spleen	<input type="checkbox"/> Spleen
<input type="checkbox"/> LEUCO% EOSN	<input type="checkbox"/> Protein % α3-glo	<input type="checkbox"/> Adrenals	<input type="checkbox"/> Adrenals
<input type="checkbox"/> LEUCO% BASO	<input type="checkbox"/> Protein % β-glo	<input type="checkbox"/> Adrenals right	<input type="checkbox"/> Adrenals right
<input type="checkbox"/> LEUCO% LUC	<input type="checkbox"/> Protein % γ-glo	<input type="checkbox"/> Adrenals left	<input type="checkbox"/> Adrenals left
<input type="checkbox"/> LEUCO% OTHERS	<input type="checkbox"/> AST(GOT)	<input type="checkbox"/> Testes	<input type="checkbox"/> Testes
<input type="checkbox"/> E-Blast	<input type="checkbox"/> ALT(GPT)	<input type="checkbox"/> Testes right	<input type="checkbox"/> Testes right
<input type="checkbox"/> RET	<input type="checkbox"/> ALP	<input type="checkbox"/> Testes left	<input type="checkbox"/> Testes left
<input type="checkbox"/> Pit	<input type="checkbox"/> LDH	<input type="checkbox"/> Epididymides	<input type="checkbox"/> Epididymides
<input type="checkbox"/> CT	<input type="checkbox"/> SDH	<input type="checkbox"/> Epididymides right	<input type="checkbox"/> Epididymides right
<input type="checkbox"/> PT	<input type="checkbox"/> GDH	<input type="checkbox"/> Epididymides left	<input type="checkbox"/> Epididymides left
<input type="checkbox"/> APTT	<input type="checkbox"/> γ-GTP	<input type="checkbox"/> Seminal vesicle	<input type="checkbox"/> Seminal vesicle
<input type="checkbox"/> FIB	<input type="checkbox"/> ChE-A	<input type="checkbox"/> Ovaries	<input type="checkbox"/> Ovaries
	<input type="checkbox"/> ChE-Brain	<input type="checkbox"/> Ovaries right	<input type="checkbox"/> Ovaries right
	<input type="checkbox"/> ChE-RBC	<input type="checkbox"/> Ovaries left	<input type="checkbox"/> Ovaries left
	<input type="checkbox"/> ChE-P	<input type="checkbox"/> Uterus	<input type="checkbox"/> Uterus
	<input type="checkbox"/> CPK		
	<input type="checkbox"/> T ₃		

チェック

39

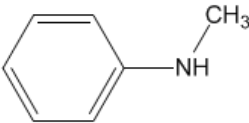
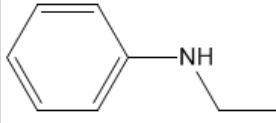
物質間でのデータの比較 (4/4)

Measured Data View (Study_View) [HessDB_Search]										
Item View		Actual	実測値表示 (Ratioを選択すると相対値表示が可能) Other windows are locked while this window is open. Data format : [Dose] mean(%) signif. F1 F3							
Study_No.	Chemical Data	Keyword	Sex		Administration					Recovery
2	100-61-8 N-methylaniline	[He]RBC	M	10%/μL	[0] 7.30	[5] 7.10	[25] 6.37 ** ▽	[125] 4.37 ** ▽		[0] 7.62
			F	10%/μL	[0] 7.02	[5] 7.12	[25] 6.20 ** ▽	[125] 4.56 ** ▽		[125] 7.07
		[He]HCT(PCV)	M	%	[0] 45.3 N	[5] 44.2	[25] 40.7 * ▽	[125] 33.7 ** ▽		[0] 7.38
			F	%	[0] 44.6	[5] 43.3	[25] 39.9 ** ▽	[125] 35.6 ** ▽		[125] 6.71
		[He]HGB	M	g/dL	[0] 15.0 N	[5] 14.6	[25] 13.2 * ▽	[125] 11.8 ** ▽		[0] 44.4
			F	g/dL	[0] 14.5	[5] 13.9 * ▽	[25] 12.7 ** ▽	[125] 12.3 ** ▽		[125] 46.5
3	103-69-5 Aniline, N-et...	[He]RBC	M	10%/μL	[0] 775	[1] 748	[5] 724 * ▽	[25] 670 ** ▽	[125] 467 ** ▽	[0] 14.5
			F	10%/μL	[0] 772	[1] 756	[5] 714 * ▽	[25] 655 ** ▽	[125] 494 ** ▽	[125] 15.7
		[He]HCT(PCV)	M	%	[0] 44.0	[1] 42.8	[5] 42.0	[25] 40.0 ** ▽	[125] 41.8 ▽	[0] 13.9 N
			F	%	[0] 43.2	[1] 41.6	[5] 39.2 ** ▽	[25] 39.0 ** ▽	[125] 39.9 * ▽	[125] 14.6
		[He]HGB	M	g/dL	[0] 15.5	[1] 15.1	[5] 14.7	[25] 13.8 ** ▽	[125] 12.3 ** ▽	[0] 796
			F	g/dL	[0] 15.3	[1] 14.9	[5] 13.9 ** ▽	[25] 13.5 ** ▽	[125] 12.7 ** ▽	[125] 747
			M							[0] 777
			F							[125] 742

報告書へのリンク (1/2)

Study_View [HessDB_Search]

Delete selected columns Format Set Measured Data View

Chem_No.		2	3	
Study_No.		2	3	
General Information	CAS No.	100-61-8	103-69-5	
General Information	Name	N-methylaniline	Aniline, N-ethyl-	
General Information	Structure		 右クリック ↓ Link to originalを選択	
General Information	Name (EINECS)	N-methylaniline	N-ethylaniline	
General Information	Name (TSCA)	Benzenamine, N-methyl-	Benzenamine, N-ethyl-	
General Information	Name (OECD HPV)		Aniline, N-ethyl-	
General Information	Synonym 1	N-Methylbenzenamine	N-Ethylbenzenamine	
General Information	Synonym 2	(Methylamino)benzene	Ethylphenylamine	
General		organic synthetic	raw material for organic	

報告書へのリンク (2/2)

http://dra4.nihs.go.jp/mhlw_data/home/paper/paper103-69-5B.html - Windows Internet Explorer

http://dra4.nihs.go.jp/mhlw_data/home/paper/paper103-69-5B.html

ファイル(E) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルプ(H)

Google 検索 動画 ニュース 急上昇 メール ポータル キャンプ 翻訳 設定 ログイン

お気に入り おすすめサイト HotMail の無料サービス Web スライス ギャラリー Windows Windows Media リンクの変更

http://dra4.nihs.go.jp/mhlw_data/home/paper/paper...

N-エチルアニリンのラットを用いる28日間反復経口投与毒性試験

Twenty-eight-day Repeat Dose Oral Toxicity Test of N-Ethylaniline in Rats

要約

染料等の原料として用いられている既存化学物質N-エチルアニリンについて、SD系[CrljCD(SD)]ラットを用い、0(対照)、1、5、25および125 mg/kg用量で28日間の反復経口投与毒性試験を実施した。動物数は1群雌雄各6匹とし、7群を設け、5群は投与終了後屠殺群、2群は対照および125 mg/kgの14日間回復群とした。

125 mg/kg群で、チアノーゼ、眼球および尿の褐色化、皮膚蒼白などの症状が雌雄に、体重増加の抑制および摂餌量の減少が雄に認められた。血液学および血液生化学検査では、いずれも有意なメヘモグロビン含有率の増加およびハインツ小体保有赤血球の出現を伴う溶血性貧血の所見ならびにプロトロンビン時間の短縮が5 mg/kg以上、カリウムの増加が25 mg/kg以上、総ビリルビンおよびアルブミンの増加、血小板およびナトリウムの減少が125 mg/kg群の雄あるいは雌雄に認められた。病理学検査では、脾臓重量の増加が認められ、組織学的にはヘモジドリン沈着および赤芽球系髄外造血巣の増加、うっ血、濾胞縁帯リンパ球の減少が5 mg/kg群の雌および25 mg/kg以上の群の雌雄に認められた。また、ヘモジドリン沈着は肝臓および腎臓にも認められ、赤芽球系造血元進所見が骨髓および肝臓に認められた。

以上の結果から、N-エチルアニリンのラットへの投与によりメヘモグロビン血症およびそれに伴う溶血性貧血が発現した。無影響量は1mg/kg/dayと推定された。

方法

1. 被験物質

被験物質N-エチルアニリンは分子量121.20、蒸気圧0.4 mmHgの淡黄色～淡褐色の液体で、水に溶けにくく、エタノール、エーテルなどの有機溶媒および植物油に溶けやすい。試験には、(株)三星化学研究所(京都)製造のもの(ロット番号A-J、純度99.8%)を入手し、冷暗所に保管した。投与液は、これを局方ゴマ油(宮澤薬品)に溶解して調製し、使用時まで冷暗所に保管した。被験物質原液および投与液中の被験物質は、安定であることを確認した。

2. 使用動物および飼育条件

日本チャールス・リバー(株)より搬入したSD系[CrljCD(SD)]ラットを、12～13日間検疫・馴化飼育を行い、5週齢(雄160～181 g、雌139～156 g)で1群雌雄各6匹として試験に用いた。ラットは、温度22±3℃、湿度55±10%、換気回数10回以上/時、照明12時間(6時～18時)に設定した飼育室で、金網ケージに個別に収容し、固型飼料[日本農産工業(株)、ラボMRストック]および水を自由摂取させた。

3. 投与量および投与方法

N-エチルアニリンのラットへの単回経口投与におけるLD50(経口)は、雄382 mg/kg、雌553 mg/kgであった。ラットを1群雌雄各4匹とし、0、3、10、30および100 mg/kg用量の14日間経口投与による投与量設定試験を実施した。30 mg/kg以上でメヘモグロビン含有率の増加およびハインツ小体保有赤血球の出現を伴う溶血性貧血の所見が認められた。しかし、100 mg/kg群においても体重や摂餌量に対する明らかな影響は認められなかった。したがって、本試験における投与量は、より明らかな毒性影響の発現が予測される125 mg/kgを最高用量とし、以下25、5および1 mg/kgの4用量と対照を設定した。また、対照および125 mg/kgについては、14日間の回復群を設けた。投与は、胃カテーテルを装着した注射筒を用いて、投与液を1日1回、28日間わたって経口投与した。対照群には局方ゴマ油

ページが表示されました

インターネット 100%