

# MEDICILON PHARMACOLOGY MODEL LIST



## Tumor Animal Models (~700)

- CDX models
- PDX models
- Syngeneic models
- Humanized models
- Orthotopic models

Data as of Jan. 2026

## Non-tumor Animal Models (~300)

- Inflammatory & autoimmune disease models
- CNS disease models
- Metabolic disease models
- Cardiovascular disease models
- Digestive disease models
- Other disease models

Data as of Jan. 2026

## Tumor Models

### CDX Models

Cancer Type	Cell Line
Brain cancer	CHP-212, LN-229, U-87 MG, U-251 MG
Breast cancer	BT474, HCC70, HCC1569, HCC1806, HCC1954, JIMT-1, MCF7, MDA-MB-231, MDA-MB-436, MDA-MB-468, MX-1, SUM 149PT, ZR-75-1
Cervix	Hela, SiHa
Colon cancer	COLO 205, DLD-1, HCT-8, HCT-15, HCT-116, HT-29, LIM-1215, LoVo, Ls174T, NCI-H508, RKO, SW48, SW480, SW620, SW837
Endometrium	AN3 CA, HEC-1-A, HEC-1-B, RL95-2
Esophageal	KYSE-520
Fibrosarcoma/Soft tissue	HT-1080
Gastric cancer	Hs 746T, MKN-45, NCI-N87, NUGC-4, SNU-16
Head and neck cancer	CAL-27, Detroit562, FaDu, TT
Leukemia	CCRF-CEM, HEL, HL-60, Jurkat E6.1, JVM-3,K-562, MOLM-13, MOLM-16, MOLT-3, MOLT-4, MV-4-11, OCI-AML-3, TF-1a, THP-1, U-937
Liver cancer	HCCLM3, Hep G2, HuH-7
Lung cancer	A427, A549, Calu-1, Calu-3, Calu-6, DMS114, EBC-1, HCC827, MOTO-211H, NCI-H69, NCI-H292, NCI-H358, NCI-H460, NCI-H520, NCI-H522, NCI-H526, NCI-H727, NCI-H820, NCI-H1299, NCI-H1373, NCI-H1568, NCI-H1581, NCI-H1650, NCI-H1703, NCI-H1975, NCI-H2122, NCI-H2228, NCI-H3122, NCI-H3255, PC9
Lymphoma	Daudi, DB, DOHH2, HH, JeKo-1, Karpas299, MAVER-1, Mino, OCI-LY10, OCI-LY19, Raji, RL, SR, SU-DHL-1, SU-DHL-2, SU-DHL-4, SU-DHL-6, TMD-8, WSU DLCL2
Melanoma	A375, C32
Myeloma	MM.1R, MM.1S, NCI-H929, OPM-2, RPMI-8226
Osteosarcoma	SJSA-1
Ovary	A2780, OVCAR-3, OVCAR-8, PA-1, SK-OV-3
Pancreatic cancer	AsPC-1, Bx PC-3, Capan-1, Capan-2, CFPAC-1, HPAF-II, Mia PaCa-2, PANC-1, SU.86.86, SW1990
Prostate	22RV1, DU145, LnCap, LNCaP-F877L mut, PC-3, Vcap
Renal cancer	786-O, A498, ACHN, OS-RC-2
Skin cancer	A-431
Urinary bladder cancer	5637, HT1376, RT4, UM-UC-3

## PDX Models

Cancer Type	Cell Line
Breast cancer	201B, 203B
Cervix	371Ce
Colon cancer	002C, 008C, 011C, 013C, 015C, 016C, 020C, 021C, 057C, 058C, 059C, 060C, 061C, 062C, 064C, 065C, 069C, 070C, 072C, 075C, 076C, 084C, 087C, 088C, 095C, 102C, 104C, 110C, 116cC, 117C, 128C, 143C
Endometrium	361En
Esophagus cancer	341Es
Gastric cancer	091Ga, 092Ga, 122Ga, 126Ga, 142Ga, 145Ga, 254Ga, 256Ga, 258Ga, 259Ga, 381Ga
Head and neck cancer	281T, 285HN, 284HN, 286HN
Leukemia	291Le, 292Le, 293Le, 294Le, 295Le
Liver cancer	212Li, 213Li, 214Li, 216Li
Lung cancer	028Lu, 047Lu, 050Lu, 053Lu, 054Lu, 263Lu, 264Lu, 265Lu, 267Lu
Lymphoma	244Ly, 245Ly
Myeloma	321Bm
Ovary	271O, 272O, 273O, 274O
Pancreatic cancer	221Pa, 222Pa, 223Pa, 224Pa, 225Pa, 226Pa, 228Pa
Prostate	351Pr, 353Pr, 354Pr, 355Pr
Renal cancer	301R, 303R, 304R
Sarcoma	332Sa, 333Sa, 334Sa
Urinary bladder cancer	232U, 234U, 235U, 236U

## Syngeneic Models

Cancer Type	Cell Line
Brain cancer	Neuro-2a
Breast cancer	4T1, EMT6, EO771, JC
Colon cancer	Colon26, CT26.WT, MC-38
Leukemia	C1498, L1210, WEHI-3
Liver cancer	H22
Lung cancer	KLN205, LLC1, M109
Lymphoma	A20, E.G7-OVA, EL4, L5178-R
Mastocytoma	P815
Melanoma	B16, B16-F0, B16-F10, Clone-M3, YUMM1.7
Myeloma	J558
Pancreas cancer	KPC, Panc 02
Prostate	RM-1
Renal cancer	RENCA
Sarcoma	S180, WEHI-164
Urinary bladder cancer	MB49

## Humanized Models (PBMC, HSC CD34<sup>+</sup>)

Cancer Type	Cell Lines in PBMC or HSC CD34 <sup>+</sup> Humanized Mice
Brain cancer	U-87 MG
Breast cancer	HCC70, HCC1954, JIMT-1, MDA-MB-231, MDA-MB-468
Colon cancer	HT-15, HT29, LoVo, Ls174T
Gastric cancer	NCI-N87, NUGC-4
Leukemia	MOLM-13, THP-1
Liver cancer	Hep G2, HuH-7
Lung cancer	A549, HCC827, NCI-H292, NCI-H838, NCI-H1975
Lymphoma	Raji, TMD8
Melanoma	A375
Myeloma	MM.1S, NCI-H929, RPMI-8226
Ovarian cancer	OVCAR-3
Pancreatic cancer	Capan-2
Renal cancer	786-O, A498
Skin cancer	A431
Urinary bladder cancer	UM-UC-3

## Orthotopic Models

Cancer Type	Orthotopic Model (Human)	Orthotopic Model (Mouse)
Brain cancer	LN299-luc, U87-MG-luc, U251-luc	G261-luc
Breast cancer	BT-474-luc, MCF-7-luc, MDA-MB-231-luc	4T1-luc
Colon cancer	HCT-116-luc, HT29-luc	MC38-luc
Gastric cancer	NCI-N87-luc	/
Leukemia	K562-luc, MOLM-13-luc, MV-4-11-luc, Nalm-6-luc, THP-1-luc	/
Liver cancer	HuH-7-luc, Hep G2-luc	H22-luc
Lung cancer	A549-luc, NCI-H460, NCI-H1650-luc, NCI-H1975-luc	LLC1-luc
Lymphoma	Raji-luc, JeKo-1-luc	/
Melanoma	A375-luc	B16-F10-luc
Myeloma	NCI-H929-luc, MM.1S-luc, OPM-2-luc	/
Ovary	OVCAR-3-luc, SK-OV-3-luc	/
Pancreatic cancer	Mia-Paca 2-luc, PANC-1-luc	Panc 02-luc
Prostate	PC-3-luc	/
Renal cancer	A498-luc	/
Sarcoma	HT1080-luc, SJSA-1-luc	/
Urinary bladder cancer	UM-UC-3-luc	MB49-luc

CNS Models

Disease	Model	Animals
Depression	Forced swimming test	Mouse/Rat
	Tail suspension test	Mouse
	5-HTP-induced head twitches response	Mouse
	Reserpine-induced ptosis	Mouse
	Yohimbine-induced lethality test	Mouse
	High-dose apomorphine antagonism	Mouse
	Chronic unpredictable mild stress (CUMS)	Rat
	Novelty suppressed feeding test	Mouse/Rat
Convulsant	MAO-A/MAO-B activity test	Mouse/Rat
	Pentylenetetrazol-induced clonic seizure	Mouse
	Bicuculline-induced clonic seizure	Mouse
	Yohimbine-induced lethality test	Mouse
Parkinson's disease	Picrotoxin-induced clonic seizure	Mouse
	Subacute model induced by MPTP	Mouse
	Chronic model induced by MPTP + Convulsant	Mouse
Dementia	Oxotremorine-induced tremors/salivation	Mouse
	Morris water maze test	Mouse/Rat
	Light-dark box test	Mouse
	Memory acquisition impairment	Mouse/Rat
	Memory consolidating impairment	Mouse
	Memory retrieval impairment	Mouse
	Activity of acetylcholinesterase test	Mouse
	D-galactose-induced subacute aging model	Mouse
Sedative hypnosis anti-anxiety	APP/PS1/Tau transgenic mice	Mouse
	Synergistic effect with pentobarbital	Mouse
	Synergies with pentobarbital drugs	Mouse
	Elevated plus maze test	Mouse/Rat
	Shuttle Box test	Mouse
Schizophrenia	Open field test	Mouse/Rat
	MK801 induced schizophrenia (positive/negative symptom)	Mouse
	Ketamine induced schizophrenia with negative symptom	Mouse
	Haloperidol-induced catalepsy	Rat
	Lower lip retraction test	Rat
	Hyperactivity induced by Amphetamine	Rat
Nociceptive pain	Hyperactivity induced by Phencyclidine	Rat
	Hot-Plate test	Mouse/Rat
	Radiant heat tail-flick test	Mouse/Rat
	Von-Frey filaments test	Mouse/Rat
	Randall-Selitto test (Pressing pain)	Mouse/Rat
	Formalin model (phase I & phase II)	Mouse
	Model of foot inflammatory pain induced by Carrageenan	Mouse/Rat
	Model of foot inflammatory pain model induced by Complete Freund's Adjuvant (CFA)	Mouse/Rat
	Acetic acid writhing test	Mouse
	LPS-induced thermal hyperalgesia	Mouse/Rat
	Sciatic nerve injury (SNI) model	Rat
	Incision-induced pain model	Rat
	Diabetic foot ulcer pain model	Mouse/Rat
	Chemotherapy pain model (Vincristine, Paclitaxel induction)	Rat
Osteoarthritis pain model	Rat	

## Digestive System Models

Diseases	Model	Animals
Gastric acid secretion and Gastric ulcer	Gastric ulcer model induced by Pyloric ligation	Rat
	Histamine induced gastric acid secretion model	Rat
	Ethanol induced gastric ulcer model	Mouse
	Non-steroidal anti-inflammatory drug induced gastric ulcer model	Rat
	Gastric ulcer model induced by water bundle stress	Rat
	Acetic acid induced chronic gastric ulcer model	Rat
	Reflux esophagitis model	Rat
	Chronic atrophic gastritis model	Rat
Inflammatory Bowel Disease (IBD)	Ulcerative colitis model induced by TNBS	Rat
	Ulcerative colitis model induced by DNBS	Rat
	Ulcerative colitis model induced by DSS drinking water	Mouse
Gastric and intestinal motility disorders	Gastric and intestinal motility model	Mouse/Rat
	Functional dyspepsia model	Rat
	Diarrhea and constipation model	Mouse/Rat

## Inflammation and Immune System Models

Diseases	Model	Animals
Arthritis	Acute joint inflammation induced by Carrageenan	Rat
	Acute joint inflammation induced CFA	Mouse/Rat
	Rheumatoid arthritis induced by II Collagen (CIA model)	Mouse/Rat
	Rheumatoid arthritis induced by Complete Freund's Adjuvant (AIA model)	Rat
	Gouty arthritis model induced by Sodium urate	Rat
Osteoarthritis	Sodium iodoacetate (MIA) induced osteoarthritis	Rat
	Partial Medial Meniscectomy (pMMx) induced osteoarthritis	Rat
	Partial Medial Meniscectomy with Anterior Cruciate Ligament severed (pMMx + ACLT) osteoarthritis	Rat
Osteoporosis	Osteoporosis model of castrated female rat	Rat
	Osteoporosis model induced by Retinoic acid A	Rat
	Glucocorticoid-induced osteoporosis model	Rat
Psoriasis	Estrogen induced vaginal epithelium mitosis	Mouse
	Tail scale model	Mouse
	IL-23 induced auricle epidermal dysplasia	Mouse
	Back skin psoriasis induced by Imiquimod	Mouse
Atopic dermatitis and eczema	Chronic atopic dermatitis model induced by DNFB	Mouse/Rat
	Subacute eczema-like model induced by DNFB	Mouse
	Eczema-like model induced by Phorbol ester	Mouse
Multiple sclerosis , Amyotrophic lateral sclerosis (MS, ALS)	EAE allergic encephalomyelitis (EAE) model	Mouse
	Cuprizone-induced demyelination of brain tissue	Mouse
Acute inflammation	Auricle swelling model	Mouse
	Toe swelling model	Rat
	Capillary permeability test	Mouse/Rat
	Granuloma proliferation model	Rat

## Metabolic Diseases Models

Diseases	Model	Animals
Diabetes	Model of type 1 diabetes induced by Streptozotocin	Mouse/Rat
	Spontaneous type 2 diabetes mice (db/db, ob/ob)	db/db, ob/ob Mouse
	Spontaneous type 2 diabetes rat (ZDF)	Zucker Rat
	Diabetic skin ulcer model	Mouse/Rat
	Diabetic foot model	Mouse/Rat
Hyperuricemia	Potassium oxonate induced	Rat/Mouse
	Adenine + Potassium oxonate induced	Rat
	Uric acid induced	Mouse
	Hypoxanthine induced	Mouse
	Adenine + Ethambutol induced	Rat
	Yeast induced	Mouse
Liver fibrosis	Biliary ligation induced	Rat
	TAA-induced	Rat
	Composite factor method induced	Rat
	ConA induced	Mouse
	Immune liver fibrosis induced by pig serum	Rat
NAFLD (NAFL / NASH)	HFD diet induced	Mouse/Rat/Hamster
	MCD diet induced	Mouse
	CDAA diet induced	Rat
	Composite factor induced	Rat
Dyslipidemia	Hereditary atherosclerosis	APOE Mouse
	High fat / cholesterol / fructose diet induced	Rat/Hamster

## Circulation System Models

Diseases	Model	Animals
Thrombus	Bleeding time (BT), Coagulation time (CT)	Mouse
	Arteriovenous bypass thrombosis model	Mouse/Rat
	Rat model of deep vein thrombosis	Rat
	Carotid artery thrombosis model	Mouse/Rat
	Caudal vein thrombosis induced by Carrageenan	Mouse
Middle cerebral artery occlusion (MCAO)	Cerebral ischemia reperfusion	Mouse/Rat
	Time window for treatment of cerebral ischemia reperfusion injury	Mouse/Rat
	The neuroprotective effect of cerebral ischemia reperfusion	Mouse/Rat
	Permanent cerebral infarction model	Mouse/Rat
Anemia	Hypoferric anemia	Rat
	Renal anemia induced by 5/6 Nephrectomy	Rat
	Renal anemia induced by Adenine	Rat

## Others

Diseases	Model	Animals
Kidney injury and failure	Acute renal failure induced by Cis-platinum	Rat
	Renal ischemia-reperfusion model	Rat
	Chronic renal failure induced by 5/6 Nephrectomy	Rat
	Chronic renal failure induced by Adenine	Rat
	Diabetic renal failure	Zucker Rat
	Renal fibrosis model	Rat

Diseases	Model	Animals
Skin healing	Full-thickness skin trauma model	Mouse/Rat
	Diabetic foot ulcer model	db/db Mouse
	Standardized Scalding Burn Model	Rat
Leukopenia	Cyclophosphamide induced	Mouse/Rat
	Cytarabine induced	Rat
	Adriamycin induced	Rat
	Cisplatin induced	Rat
Respiratory system	Pulmonary fibrosis model induced by Bleomycin	Mouse/Rat
	Pulmonary fibrosis model induced by Paraquat	Rat
	Silicotic model induced by Silicon dioxide	Mouse/Rat
	Expelling phlegm test (phenol red excretion method)	Mouse
	Pulmonary inflammation induced by LPS	Mouse
	Tracheal goblet cell staining counts	Mouse
Allergic rhinitis	Induced by OVA + Aluminum hydroxide	Mouse
	Induced by OVA + DPT vaccine induction without cell	Rat
Prostatic disease	Prostatic hyperplasia model (Normal/Castration)	Mouse/Rat
	Prostatic hyperplasia induced by Androgen	Mouse/Rat
	Nonbacterial prostatitis	Rat
Sexual dysfunction(BE)	Erectile function test in normal rat	Rat
	Erectile function test in castrated rat	Rat
	Sexual behavior test experiment (Back climbing experiment)	Rat
Alopecia and Alopecia areata	Hair loss induced by Testosterone propionate	Mouse/Rat
	Rosin and Paraffin + Testosterone propionate induced alopecia	Mouse
	Imiquimod induced alopecia areata	Mouse
	Cyclophosphamide induced alopecia areata	Mouse
Gynecological disease	Mammary hyperplasia model	Rat
	Uterine fibroid model	Rat
	Endometriosis model	Mouse/Rat
Itch model	Pruritus induced by Chloroquine	Mouse
	Pruritus induced by Dextranum	Mouse
	Pruritus induced by Istamine	Mouse
Hyperthyreosis	Secondary hyperthyroidism model	Mouse/Rat



## MEDICILON

**Email:** [marketing@medicilon.com](mailto:marketing@medicilon.com)    **Website:** [www.medicilon.com](http://www.medicilon.com)

**Address:** > 20 Maguire Road, Suite 103, Lexington, MA 02421, USA

> 585 Chuanda Road, Pudong, Shanghai, 201299, China