



Pharmaceuticals – Pipeline Overview¹ (as of Dec 13, 2022)

Phase 0 ²		Phase I		Phase II		Phase III	
DGKalpha Inh (BAY 2862789)	å. •	Elimusertib (ATR Inhibitor) (BAY 1895344)	.i. •	Regorafenib (combi Nivolumab) (BAY 734506) // Solid tumors (recurrent or metastatic)	.i., (Copanlisib (PI3K Inhibitor) (BAY 806946) // Non-Hodgkin Lymphoma (CHRONOS-4)	,i, 0
PSMA TAC (BAY 3546828)		AhR Inhibitor (BAY 2416964)	,Å, 🔵	Asundexian (FXIa Inhibitor) (BAY 2433334)	9	Darolutamide (AR Inhibitor) (BAY 1841788)	
PSMA SMOL TAC (BAY 3563254)		mEGFR Inhibitor (BAY 2927088)	.i., •	/// 2º Stroke Prevention (PACIFIC-STROKE) /// Major Adverse Cardiac Events Prevention (PACIFIC-AMI)	o**o	// Prostate Cancer (mHSPC) (ARANOTE) // Adjuvant Prostate Cancer (DASL-HiCaP)	٠ <u>٠</u> , O
VVD NRF2 Inh (BAY 3605349)	.i. •	²²⁷ Th-Trastuzumab corixetan (HER2 TTC) (BAY 2701439)		Runcaciguat (sGC Activator) (BAY 1101042)	يقي و	Finerenone (MR Antagonist) (BAY 948862)	,i, 0
VVD STAT3 Inh (BAY 3630914)	.i. •		, Å, •	// Chronic Kidney Disease (CKD) (CONCORD) // Non-prolif. Diabetic Retinopathy (NPDR) (NEON-NPDR)		// Heart Failure (HFmr/pEF) (FINEARTS-HF) // Non-diabetic CKD (FIND-CKD)	•~•
SEMA 3 ^a (BAY 3401016)	Y	CCR8 Ab (BAY 3375968)	Y	BDKRB1 Receptor Antagonist (BAY 2395840)	يد ا	Vericiguat (sGC Stimulator) (BAY1021189)	.i., O
LGMD2i Gene Therapy (LION-101)	ğ •	Congestive Heart Failure Gene Therapy (NAN-101)	§ •	// Neuropathic Pain (BRADINP)		// Heart Failure (HFrEF) (VICTOR³) Asundexian (FXIa Inhibitor) (BAY 2433334)	
Next Generation Liver MRI (BAY 3393081)	Ö •	sGC Activator (BAY 3283142)	.i. •	Gadoquatrane (High Relaxivity Contrast Agent) (BAY 1747846)		// Stroke Prevention in Atrial Fibrillation (OCEANIC-AF)	• •
,		Anti-a2AP (BAY 3018250)	Y •	// Magnetic Resonance Imaging (HRCA-PAT) Adrenomedullin Pegol (PEG-ADM) (BAY 1097761)		Elinzanetant (Neurokinin-1,3 Rec Antagonist) (BAY 3427080)	્રે 🔵
		P2X4 Antagonist (BAY 2328065)	, i. •	# Acute Resp. Distress Syn. (ARDS) (SEAL)	3	// Vasomotor Symptoms (OASIS)	
		BDKRB1 Receptor Antagonist (BAY 2395840)	.i. •			Aflibercept 8MG (BAY 865321) // Diabetic Macular Edema (DME) (PHOTON4)	y, O
		Zabedosertib (IRAK4 Inhibitor) (BAY 1834845)	, i.,			// Neovasc. Age-rel. Macular Degen. (nAMD) (PULSAR)	
		sGC Activator (BAY 1211163)	.i. •			Submissions	
		Parkinson's Disease Cell Therapy (BRT-DA-01)				Darolutamide (AR Inhibitor) / ADT with	Å, O
		Parkinson's Disease Gene Therapy (AAV2-GDNF-PD)	ĕ ●			Chemotherapy // EU, Japan, China: mHSPC	3ª0 U
Oncology		Multiple System Atrophy Gene Therapy (AAV2-GDNF-MSA)	ğ •			Aflibercept (VEGF inhibitor) # EU: Retinopathy of prematurity	3, O
Cardiovascular Diseases		Pompe Disease Gene Therapy (ACTUS-101)	ğ •			20. Notinopathy of promatanty	
Women's Health		Huntington's Disease Gene Therapy (BV-101)	ğ •			Submission in preparation	
Others			•			Aflibercept 8MG // Diabetic Macular Edema (DME) (PHOTON¹) // Neovasc. Age-rel. Macular Degen. (nAMD) (PULSAR)	3 , 0
New therapeutic entity							

🌱 Antibody 🦒 Biologic 👸 Cell Therapy 📋 Contrast Agent 🎽 Gene Therapy 💢 Radiotherapy 🎎 Small Molecule

¹ Bayer and partner sponsored + 3rd party label enabling studies with first patient first visit 2 Pre-clinical selected assets on path to IND 3 Conducted by Merck & Co 4 Conducted by Regeneron Pharmaceuticals



Pharmaceuticals – Pipeline Details Phase III¹ (as of Dec 13, 2022)

Therapeutic Area	Candidate medication	Modality	Compound Origin	Indication	Ct.gov Identifier	Estimated/actual primary completion	Status
Oncology	Copanlisib (PI3K Inhibitor)	å.	Bayer	Non-Hodgkin Lymphoma (CHRONOS-4)	NCT02626455	Q1 2023	Study ongoing
	Darolutamide (AR Inhibitor)	*.	Orion	Prostate Cancer (mHSPC) (ARANOTE)	NCT04736199	Q1 2024	Study ongoing
				Adjuvant Prostate Cancer (DASL-HiCaP)	NCT04136353	Q1 2028	Study ongoing
Cardiovascular Diseases	Finerenone (MR Antagonist)	*	Bayer	Heart Failure (HFmr/pEF) (FINEARTS-HF)	NCT04435626	Q3 2024	Study ongoing
Diseases				Non-diabetic CKD (FIND-CKD)	NCT05047263	Q1 2026	Study ongoing
	Vericiguat (sGC Stimulator)	Å	Bayer	Heart Failure (HFrEF) (VICTOR3)	NCT05093933	Q1 2025	Study ongoing
	Asundexian (FXIa Inhibitor)	*.	Bayer	Stroke Prevention in Atrial Fibrillation (OCEANIC-AF)	NCT05643573	Q3 2025	Study ongoing
Women's Health	Elinzanetant (Neurokinin-1,3 Rec Antagonist)	. *.	KaNDy	Vasomotor Symptoms (OASIS-1, OASIS-2, OASIS-3, OASIS-4)	NCT05042362 NCT05099159 NCT05030584 NCT05587296	Q2 2023 Q2 2023 Q1 2023 Q1 2024	Studies ongoing
Others	Aflibercept 8MG	by.	Regeneron	Diabetic Macular Edema (DME) (PHOTON⁴)	NCT04429503	Q2 2022	Primary completion date achieved. Data presented
				Neovasc. Age-rel. Macular Degen. (nAMD) (PULSAR)	NCT04423718	Q3 2022	at AAO in Oct. 2022

¹ Bayer and partner sponsored + 3rd party label enabling studies with first patient first visit 3 Conducted by Merck & Co 4 Conducted by Regeneron Pharmaceuticals























Pharmaceuticals – Pipeline Details Phase II¹ (as of Dec 13, 2022)

Therapeutic Area	Candidate medication	Modality	Compound Origin	Indication	Ct.gov Identifier	Estimated/actual primary completion	Status
Oncology	Regorafenib (combi Nivolumab) (BAY 734506)	هُمْ.	Bayer	Solid tumors (recurrent or metastatic)	NCT04704154	Q1 2023	Study ongoing
Cardiovascular Diseases	Asundexian (FXIa Inhibitor) (BAY 2433334)	*.	Bayer	2º Stroke Prevention (PACIFIC-STROKE) Major Adverse Cardiac Events Prevention (PACIFIC-AMI)	NCT04304508 NCT04304534	Q1 2022 Q1 2022	Studies completed; data presented at ESC in Aug. 2022
	Runcaciguat (sGC Activator) (BAY 1101042)	. *.	Bayer	Chronic Kidney Disease (CKD) (CONCORD)	NCT04507061	Q1 2022	Study completed; detailed evaluation ongoing
Others	BDKRB1 Receptor Antagonist (BAY 2395840)	å .	Bayer/Evotec	Neuropathic Pain (BRADiNP)	NCT05219812	Q4 2022	Study ongoing
	Gadoquatrane (High Relaxivity Contrast Agent, HRCA) (BAY 1747846)	Ö	Bayer	Magnetic Resonance Imaging (HRCA-PAT)	NCT04307186	Q4 2022	Study ongoing
	Runcaciguat (sGC Activator) (BAY 1101042)	<u>ئ</u>	Bayer	Non-prolif. Diabetic Retinopathy (NPDR) (NEON-NPDR)	NCT04722991	Q4 2023	Study ongoing
	Adrenomedullin Pegol (PEG-ADM) (BAY 1097761)	by.	Bayer	Acute Resp. Distress Syn. (ARDS) (SEAL)	NCT04417036	Q4 2024	Study ongoing

1 Bayer and partner sponsored + 3rd party label enabling studies with first patient first visit





















Pharmaceuticals – Pipeline Details Phase I¹ (as of Dec 13, 2022)

Therapeutic Area	Candidate medication	Modality	Compound Origin	Indication	Ct.gov Identifier	Estimated/actual primary completion	Status
	Elimusertib (ATR Inhibitor) (BAY 1895344)	.	Bayer	Advanced solid tumors, Non-Hodgkin's Lymphoma, Mantle Cell Lymphoma	NCT03188965 NCT04095273 NCT04267939	Q4 2022 / Q1 2025	Studies ongoing
	AhR Inhibitor (BAY 2416964)	,Å.	Bayer/DKFZ	Advanced solid tumors	NCT04069026 NCT04999202	Q1 2025 / Q2 2025	Studies ongoing
Oncology	mEGFR Inhibitor (BAY 2927088)	مگره	Bayer/Broad Institute	Advanced Non-small Cell Lung Cancer with EGFR Mutation and/or HER2 Mutation	NCT05099172	Q4 2025	Study ongoing
	²²⁷ Th-Trastuzumab corixetan (HER2 TTC) (BAY 2701439)		Bayer	Cancers with HER2 Expression	NCT04147819	Q3 2026	Study ongoing
	DGKzeta Inhibitor (BAY 2965501)	À.	Bayer/DKFZ	Cancer	NCT05614102	Q3 2026	Study ongoing
	CCR8 Ab (BAY 3375968)		Bayer	Advanced solid tumors	NCT05537740	Q4 2026	Study ongoing
	Congestive Heart Failure Gene Therapy (NAN-101)	ğ	AskBio	Congestive Heart Failure	NCT04179643		Phase I study and planning activities for subsequent phases ongoing
Cardiovascular Diseases	sGC Activator (BAY 3283142)	هُ.	Bayer	Chronic Kidney Disease (CKD)	NCT05491642	Q1 2023	Study ongoing
	Anti-a2AP (BAY 3018250)		Bayer	Acute Ischemic Stroke; Pulmonary Embolism		Q2 2023	Study planned
Women's Health	P2X4 Antagonist (BAY 2328065)	, Å,	Bayer	Endometriosis	NCT03427788 NCT04027192 NCT04851483	Q4 2018 / Q3 2020 / Q4 2021	Phase II decision expected in HY1 2023
	BDKRB1 Receptor Antagonist (BAY 2395840)	•	Bayer/Evotec	Endometriosis	NCT05517746	Q4 2020	Phase II decision expected in HY1 2023
	Zabedosertib (IRAK4 Inhibitor) (BAY 1834845)	مگر	Bayer	Atopic Dermatitis		Q4 2017 / Q3 2020	Studies completed. Phase II decision taken for Atopic Dermatitis
	sGC Activator (BAY 1211163)	•	Bayer	Acute Respiratory Distress Syndrome	NCT04609943	Q2 2023	Study ongoing
	Parkinson's Disease Cell Therapy (BRT-DA-01)	10	BlueRock	Parkinson's Disease	NCT04802733	Q2 2023	Study ongoing
Other	Parkinson's Disease Gene Therapy (AAV2-GDNF-PD)	ğ	AskBio	Parkinson's Disease	NCT04167540	Q4 2023	Study ongoing
	Multiple System Atrophy Gene Therapy (AAV2-GDNF-MSA)	ğ	AskBio	Multiple System Atrophy	NCT04680065	Q1 2024	Study recruiting
	Pompe Disease Gene Therapy (ACTUS-101)	ğ	AskBio	Pompe Disease	NCT03533673	Q2 2025	Study ongoing
	Huntington's Disease Gene Therapy (BV-101)	¥	AskBio	Huntington's Disease	NCT05541627	Q4 2025	Study recruiting

¹ Bayer and partner sponsored + 3rd party label enabling studies with first patient first visit





















Pharmaceuticals – Pipeline Details Oncology¹ (as of Dec 13, 2022)

Candidate medication	Indication	Modality	Compound Origin	Phase 0 ²	Phase I	Phase II	Phase III	Ct.gov Identifier	Estimated/actual primary completion	Status
Copanlisib (PI3K Inhibitor) (BAY 806946)	Non-Hodgkin Lymphoma (CHRONOS-4)	مگر	Bayer					NCT02626455	Q1 2023	Study ongoing
Darolutamide (AR Inhibitor) (BAY 1841788)	Prostate Cancer (mHSPC) (ARANOTE)	, Å,	Orion					NCT04736199	Q1 2024	Study ongoing
	Adjuvant Prostate Cancer (DASL-HiCaP)							NCT04136353	Q1 2028	Study ongoing
Regorafenib (combi Nivolumab) (BAY 734506)	Solid tumors (recurrent or metastatic)	٠	Bayer					NCT04704154	Q1 2023	Study ongoing
Elimusertib (ATR Inhibitor) (BAY 1895344)	Advanced solid tumors, Non-Hodgkin's Lymphoma, Mantle Cell Lymphoma	, Å,	Bayer					NCT03188965 NCT04095273 NCT04267939	Q4 2022 Q1 202 Q1 2025	Studies ongoing
AhR Inhibitor (BAY 2416964)	Advanced solid tumors	؞ؙؙ؞	Bayer/DKFZ					NCT04069026 NCT04999202	Q1 2025 Q2 2025	Studies ongoing
mEGFR Inhibitor (BAY 2927088)	Advanced Non-small Cell Lung Cancer with EGFR Mutation and/or HER2 Mutation	؞ؙؙؗ؞	Bayer/Broad Institute					NCT05099172	Q4 2025	Study ongoing
²²⁷ Th-Trastuzumab corixetan (HER2 TTC) (BAY 2701439)	Cancers with HER2 Expression		Bayer					NCT04147819	Q3 2026	Study ongoing
DGKzeta Inhibitor (BAY 2965501)	Cancer	Å	Bayer/DKFZ					NCT05614102	Q3 2026	Study ongoing
CCR8 Ab (BAY 3375968)	Advanced solid tumors	Y	Bayer					NCT05537740	Q4 2026	Study ongoing
DGKalpha Inh (BAY 2862789)	Cancer	, Å,	Bayer/DKFZ							
PSMA TAC (BAY 3546828)	Advanced Prostate Cancer		Lantheus (prev. Progenics)							
PSMA SMOL TAC (BAY 3563254)	Advanced Prostate Cancer		Noria Therapeutics/PSMA Therapeutics							
VVD NRF2 Inh (BAY 3605349)	Cancer	, Å,	Vividion							
VVD STAT3 Inh (BAY 3630914)	Cancer	*	Vividion							

¹ Bayer and partner sponsored + 3rd party label enabling studies with first patient first visit 2 Pre-clinical selected assets on path to IND



















Pharmaceuticals – Pipeline Details Cardiov. Diseases¹ (as of Dec 13, 2022)

Candidate medication	Indication	Modality	Compound Origin	Phase 0 ²	Phase I	Phase II	Phase III	Ct.gov Identifier	Estimated/actual primary completion	Status
Finerenone (MR Antagonist) (BAY 948862)	Heart Failure (HFmr/pEF) (FINEARTS-HF)	مگر	Bayer					NCT04435626	Q3 2024	Study ongoing
(BAT 940002)	Non-diabetic CKD (FIND-CKD							NCT05047263	Q1 2026	Study ongoing
Vericiguat (sGC Stimulator) (BAY1021189)	Heart Failure (HFrEF) (VICTOR3)	*	Bayer					NCT05093933	Q1 2025	Study ongoing
Asundexian (FXIa Inhibitor) (BAY 2433334)	Stroke Prevention in Atrial Fibrillation (OCEANIC-AF)	o*to	Bayer					NCT05643573	Q3 2025	Study ongoing
	2º Stroke Prevention (OCEANIC-STROKE)							NCT04304508	Q1 2022	Phase II studies completed; data
	Major Adverse Cardiac Events Prevention (PACIFIC-AMI)	a						NCT04304534	Q1 2022	presented at ESC in Aug. 2022
Runcaciguat (sGC Activator) (BAY 1101042)	Chronic Kidney Disease (CKD) (CONCORD)	• ♣ •	Bayer					NCT04507061	Q1 2022	Study completed; detailed evaluation ongoing
Congestive Heart Failure Gene Therapy (NAN-101)	Congestive Heart Failure	\overline{\over	AskBio					NCT04179643		Phase I study and planning activities for subsequent phases ongoing
sGC Activator (BAY 3283142)	Chronic Kidney Disease (CKD)	o.A.o	Bayer					NCT05491642	Q1 2023	Study ongoing
Anti-a2AP (BAY 3018250)	Acute Ischemic Stroke; Pulmonary Embolism		Bayer						Q2 2023	Study planned
SEMA 3 ^a (BAY 3401016)	Acute Kidney Injury, Alport Syndrome		Bayer/Evote c							

¹ Bayer and partner sponsored + 3rd party label enabling studies with first patient first vist 2 Pre-clinical selected assets on path to IND 3 Conducted by Merck & Co





















Pharmaceuticals – Pipeline Details Women's Health¹ (as of Dec 13, 2022)

Candidate medication	Indication	Modality	Compound Origin	Phase 0 ²	Phase I	Phase II	Phase III	Ct.gov Identifier	Estimated/actual primary completion	Status
Elinzanetant (Neurokinin-1,3 Rec Antagonist) (BAY 3427080)	Vasomotor Symptoms (OASIS-1, OASIS-2, OASIS-3, OASIS-4)	•	KaNDy					NCT05042362 NCT05099159 NCT05030584 NCT05587296	Q2 2023 Q2 2023 Q1 2023 Q1 2024	Studies ongoing
P2X4 Antagonist (BAY 2328065)	Endometriosis	*.	Bayer					NCT03427788 NCT04027192 NCT04851483	Q4 2018 Q3 2020 Q4 2021	Studies completed; Phase II decision expected in HY1 2023
BDKRB1 Receptor Antagonist (BAY 2395840)	Endometriosis	å .	Bayer/Evotec					NCT05517746	Q4 2020	Phase II decision expected in HY1 2023

1 Bayer and partner sponsored + 3rd party label enabling studies with first patient first visit 2 Pre-clinical selected assets on path to IND





















Pharmaceuticals – Pipeline Details Other Ther. Areas¹ (as of Dec 13, 2022)

Candidate medication	Indication	Modality	Compound Origin	Phase 0 ²	Phase I	Phase II	Phase III	Ct.gov Identifier	Estimated/actual primary completion	Status
Aflibercept 8MG (BAY 865321)	Diabetic Macular Edema (DME) (PHOTON⁴)	مم	Regeneron					NCT04429503	Q2 2022	Primary completion date achieved. Data presented
	Neovasc. Age-rel. Macular Degen. (nAMD) (PULSAR)							NCT04423718	Q3 2022	at AAO in Oct. 2022
BDKRB1 Receptor Antagonist (BAY 2395840)	Neuropathic Pain (BRADiNP)	*	Bayer/Evotec					NCT05219812	Q4 2022	Study ongoing
Gadoquatrane (High Relaxivity Contrast Agent (HRCA) (BAY 1747846)	Magnetic Resonance Imaging (HRCA-PAT)	Ö	Bayer					NCT04307186	Q4 2022	Study ongoing
Runcaciguat (sGC Activator) (BAY 1101042)	Non-prolif. Diabetic Retinopathy (NPDR) (NEON-NPDR)	•	Bayer					NCT04722991	Q4 2023	Study ongoing
Adrenomedullin Pegol (PEG-ADM) (BAY 1097761)	Acute Resp. Distress Syn. (ARDS) (SEAL)	مم	Bayer					NCT04417036	Q4 2024	Study ongoing
Zabedosertib (IRAK4 Inhibitor) (BAY 1834845)	Atopic Dermatitis	*	Bayer							Studies completed. Phase II decision taken for Atopic Dermatitis
sGC Activator (BAY 1211163)	Acute Respiratory Distress Syndrome	.	Bayer					NCT04609943	Q2 2023	Study ongoing
Parkinson's Disease Cell Therapy (BRT-DA-01)	Parkinson's Disease	10	BlueRock					NCT04802733	Q2 2023	Study ongoing
Parkinson's Disease Gene Therapy (AAV2-GDNF-PD)	Parkinson's Disease	ğ	AskBio					NCT04167540	Q4 2023	Study ongoing
Multiple System Atrophy Gene Therapy (AAV2-GDNF-MSA)	Multiple System Atrophy	曼	AskBio					NCT04680065	Q1 2024	Study recruiting
Pompe Disease Gene Therapy (ACTUS-101)	Pompe Disease	ğ	AskBio					NCT03533673	Q2 2025	Study ongoing
Huntington's Disease Gene Therapy (BV-101)	Huntington's Disease	ğ	AskBio					NCT05541627	Q4 2025	Study recruiting
LGMD2i Gene Therapy (LION-101)	Limb-Girdle Muscular Dystrophy 2i	ğ	AskBio							
Next Generation Liver MRI (BAY 3393081)	Contrast Media	Ö	Bayer							

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