Drug (TYK2)	Indications	Key readouts & primary endpoint	Trials	Company
Deucravacitinib (Sotyktu)	Plaque psoriasis; Psoriatic arthritis UC (Ph2)	Proportion achieving PASI-75 and sPGA 0/1 responses at week 52.	FDA approved	Bristol Myers Squibb
NDI-034858 (to be known as TAK-279)	Plaque psoriasis Psoriatic arthritis SLE and IBD	Psoriasis: proportion of patients reaching PASI-75 compared to placebo at 12 weeks. Phase 2 psoriatic arthritis: met primary endpoint. 54.2% of patients treated with TAK-279 (30 mg) achieved ACR 20 compared to 29.2% in the placebo at week 12	Phase 2b: complete Phase 3 to be initiated in plaque psoriasis (FY23) and PsA (FY24)	Takeda (acquired from Nimbus in 2022)
ESK-001	Psoriasis, SLE and uveitis	Psoriasis: PASI-75 at 12 weeks SLE: proportion of patients with improvement in BICLA at week 48	Phase 2b with SLE Phase 2 psoriasis Phase 2 uveitis	Alumis
Ropsacitinib (PF-06826647)	Plaque psoriasis	Primary outcome: PASI-90 and incidence of adverse effects at week 16. Met primary endpoint; treatment-related adverse events were mild/moderate.	Phase 2 completed (NCT03895372)	Pfizer licensed to Proivant
GLPG3667	Plaque psoriasis Dermatomyositis SLE	Phase 1b: week 4 mean PASI percent change from baseline (-42% for 150mg GLPG3667 compared to -26% placebo). Phase 2 SLE: proportion who achieve SRI-4 response at week 32.	Phase 1b Phase 2 SLE, dermatomyositis	Galapagos
VTX958	Psoriasis; Crohn's disease	Psoriasis: PASI-75 at week 16. The trial met statistical significance on the primary endpoint and all key secondary endpoints but did not meet the internal target for further development. Crohn's: phase 2 trial will continue to enroll with interim efficacy analysis in Q1 2024. Primary endpoint: reduction in CDAI and endoscopic response at the end of the induction period.	Phase 2 in psoriasis to be terminated. Phase 2 in IBD continues to enroll.	Ventyx Biosciences
SDC-1801	Plaque psoriasis	Demonstrated a favorable profile in safety and pharmacokinetics from the initial cohorts in part one. Fully safety results expected halfway through 2024.	Phase 1a - dosed the first subjects in the multiple ascending dose section	Sareum
Brepocitinib (PF-06700841, dual TYK2&JAK1)	Dermatomyositis; SLE	Phase 2b dermatomyositis n=218: at week 16, 60 mg brepocitinib showed ACR20 response rates of 74.6% compared to the placebo group (43.3%). 15 serious adverse events in 12 participants (5.5%). Failed phase 2 study in SLE	Phase 3 dermatomyositis Phase 2b in SLE (did not meet statistical significance)	Proivant Therapeutics
TLL018	Rheumatoid arthritis	Proportion of patients achieving ACR50 at Week 12. Interim results demonstrated superior efficacy over tofacitinib in RA. Well-tolerated.	Phase 2	TLL Pharmaceutical
OST-122	Ulcerative colitis	Safety/efficacy (modified Mayo score)	Phase 1b/2a	Oncostellae
QY201	Atopic dermatitis	Treatment emergent adverse events and % achieving improvement from baseline in EASI-75 at week 12	Phase 1b/2	E-nitiate Biopharmaceuticals
TDM-180935	Atopic dermatitis	Safety, adverse events and plasma concentration	Phase 1	TechnoDerma Medicines

Drug (IL-17)	Indications	Readouts & Efficacy	Company
Ixekizumab (Taltz)	Approved in moderate to severe plaque psoriasis	80mg every 2 weeks PASI-75 67% PASI 90 49%	Eli Lilly
Secukinumab (Cosentyx)	Psoriatic arthritis Ankylosing spondylitis Plaque psoriasis Hidradenitis suppurativa Enthesitis-related arthritis	300mg PASI-75 63.7% PASI-90 45.4% ASAS20 response by the 16th week and clinical effects were retained for 52 weeks.	Novartis
Brodalumab (Siliq)	Moderate to severe plaque psoriasis	210mg PASI-75 70.3% PASI-90 52.7% 1.4% discontinuation to adverse effects	Developed by Amgen AstraZeneca Valeant Pharmaceuticals
Bimekizumab (Bimzelx)	Approved for Plaque psoriasis (3 phase III trials)	PASI90 at week 16 of 85% Long-term data showed that most patients maintained high levels of clinical response through three years.	UCB
DC-806	Plaque Psoriasis Phase II	53% PASI75 at week 16	Dice Therapeutics since acquired by Eli Lilly
Izokibep	Phase 2b/3 Hidradentitis suppurativa	At week 16, did not meet the primary endpoint of HiSCR75 in phase 2. Still has an ongoing phase 3 for HS estimated to be completed in 2025.	Acelyrin
Remtolumab (previously ABT-122)	Psoriatic arthritis Discontinued after phase 2	Discontinued due to treatment-emergent adverse effects	AbbVie
Sonelokimab (previously M1095)	Psoriatic arthritis Phase 2 (NCT05640245) Hidradenitis Suppurativa	PASI 90 responses in 80%+ patients at week 12 PASI 100 responses in almost 6 out of 10 patients at week 24 HS: 57% achieved HiSCR75 at week 24 with improvements in QoL. No newly observed safety concerns.	MoonLake Immunotherapeutics

Drug (IL-23)	Indications	Efficacy	Company
Tildrakizumab-asmn (Ilumya)	IL-23p19 inhibitor in plaque psoriasis	2 phase III trials. In reSURFACE 1, 64% reached PASI-75 and 24% PASI-100 compared to 6% and 0% in placebo respectively. Extension label studies found 90% of patients maintained their responses through to year 5.	Sun Pharmaceuticals
Ustekinumab (Stelara)	Plaque psoriasis, psoriatic arthritis, Crohn's disease and ulcerative colitis.	67% of patients receiving Stelara achieved PASI-87 compared to 3% placebo. Real world evidence in Crohn's disease: 72 patients had a post-induction review in which a clinical response had occurred in 53% of patients and clinical remission in 8%. For patients on ustekinumab at 1 year, clinical response occurred in 71% and remission in 14%.	Janssen Biotech
Guselkumab	Plaque psoriasis and psoriatic arthritis	In PsA, ACR20 was achieved by 44% treated with guselkumab compared to 20% in the placebo group. Over 80% who achieved ACR20/50/70 maintained the response at week 48.	Janssen Biotech
Risankizumab (Skyrizi)	Plaque psoriasis Crohn's disease (phase 3)	FDA approval was based on phase III data. At week 16 PASI-90 was achieved by 75.3% receiving risankizumab versus 4.9% receiving placebo and 42% receiving ustekinumab. At 52 weeks, 81% achieved PASI-90 and that was statistically significant compared to placebo. Crohn's disease: met all primary and secondary endpoints vs. Stelara in phase 3 SEQUENCE trial	AbbVie
Mirikizumab (Omvoh)	FDA approved Ulcerative colitis (adults) Phase 3 in Crohn's disease Phase 3 to be commenced in UC pediatric patients	Adult UC: 2 phase III trials evaluating induction and maintenance therapy. At week 12, clinical remission in the induction trial was 24.2% vs. 13.3%, ($P<0.001$) and at week 40 of the maintenance trial 49.9% vs. 25.1%, ($P<0.001$). Adverse events of nasopharyngitis and arthralgia were more frequent in the treatment arm vs placebo. In those treated with mirikizumab (n=1217) 15 had an opportunistic infection and 8 had cancer. Crohn's disease: phase 3 met the co-primary and all secondary endpoints	Eli Lilly
Brazikumab (previously MEDI2070)	Discontinued following Phase 2 in Crohn's disease and Ulcerative colitis	Phase 2a involving 119 patients with CD failed by treatment with TNF antagonists. CDAI response at week 8 occurred in 49.2% receiving MEDI2070 compared to 26.7% in placebo. At 24 weeks, clinical response occurred in 53.8% of those receiving MEDI2070 vs 57.7% in placebo. Discontinuation cited as due to an evolution in the competitive landscape	MedImmune and AstraZeneca

Drug (IL-4/13)	Indications	Efficacy/Safety	Company
Dupilumab (Dupixent)	See below COPD	In atopic dermatitis, real world evidence showed at 16 weeks the pooled proportion of patients achieving 50%, 75% and 90% EASI score improvement was 85.1%, 59.8%, and 26.8%, respectively. Safety: the most common adverse event was conjunctivitis (26.1%)	Sanofi and Regeneron
CM-310	Moderate to severe atopic dermatitis Phase III completed NDA to be submitted	Being studied in two phase III studies. Met co-primary endpoints. Phase 2b results found that at week 16 the proportion of EASI-75 responders from baseline was 70% in the high dose group compared to 20% in the placebo group. Safety: most common TEAEs were URTI, atopic dermatitis, hyperlipidaemia and hyperuricemia.	Keymed Biosciences
Elarekibep	Inhaled IL-4RA for type 2 endotype asthma Discontinued	Trials was stopped due to a non-clinical toxicology study.	AstraZeneca
AK-120 (Manfidokimab)	Atopic dermatitis Phase II	Phase II in progress (recruiting) estimated completion Q1 2024. Efficacy: on day 29 the proportion reaching EASI 50 and 75 in the AK120 treatment groups was 64.5% and 35.5% respectively. Safe and well tolerated in healthy adults and atopic dermatitis patients	Akeso
Tralokinumab (Adbry)	FDA Approved for atopic dermatitis	15.8% achieved IGA and 25% achieved EASI-75 at week 16. Combination therapy resulting in 38% achieving IGA of 0/1 and 56% achieving EASI-75	MedImmune and AstraZeneca
Lebrikizumab	Atopic dermatitis	Long-term extension study (ADjoin) - around 80% of lebrikizumab responders maintained improvements in skin clearance at the 2 year mark with continued treatment, 2 Phase 3 trials EASI-75 occurred in 58.8% (n=283) of the lebrikizumab group compared to 16.2% (n=141) of the placebo group. Incidence of conjunctivitis was higher in the treatment group.	Eli Lilly
CBP-201 (rademikibart) anti-IL-4Rα	Atopic dermatitis Type 2 inflammatory asthma	Phase 2 trial involved 255 patients. The primary endpoint of IGA of 0 or 1 at week 16, showed 30.3% of patients receiving CBP-201 improving compared to 7.5% in the placebo group. This was statistically significant. EASI-75 was 62.9% in the treatment group compared to 23.5% for placebo.	Connect Biopharma
APG-777	Phase I Atopic dermatitis Considering phase 2 initiation in asthma in 2025.	Phase I will include a single ascending dose (SAD) and multiple ascending dose (MAD) component. The primary endpoint is safety. Preclinically demonstrated equivalent potency to lebrikizumab in the inhibition of IL-13 with a longer half life with the potential for more infrequent dosing every 2-3 months.	Apogee Therapeutics

Drug (TL1A)	Indications/Stage	Efficacy and Safety	Company
RVT-3101 previously PF-06480605	Ulcerative colitis: Roche will initiate Ph3 in 2024	Phase 2a (TUSCANY) 42/50 patients completed the study. 38.2% showed endoscopic improvement at week14 Safety: 109 AEs of which 18 were treatment related (n=50)	Roivant and Pfizer 1x monthly sc to be sold to Roche for $7.1 billion with the deal expected to close by the end of the first quarter of 2024.
MK-7240 (PRA023)	Ulcerative colitis and Crohn's disease: Phase 3 trial not yet recruiting (NCT06052059).	Phase 2a 26% PRA023 achieved endoscopic response vs 12% historial placebo and 49% achieved clinical remission CDAI <150 points vs 16% placebo.	Prometheus Biosciences acquired by Merck & Co
TEV-48574	Phase II in Ulcerative colitis and Crohn's disease (n=280 patients)	Interim data from the phase 2 trial is due in the second half of 2024. Missed the primary endpoint in asthma trials.	Teva

Drug	Indications	Efficacy and Safety	Company
NT-0796	Phase Ib/IIa in Parkinson's disease Phase Ib/IIa in obese patients with risk factors for atherosclerotic cardiovascular disease.	Phase 1 study confirming brain penetration with CSF drug concentration. A dose dependent PD effect was observed through reduction in CRP and inhibition of stimulated IL-β and IL-18 in ex vivo blood samples. Well tolerated and no LFT abnormalities.	NodThera
NT-0249	Phase I single ascending dose and multiple ascending dose studies completed	Safe and well tolerated with proportional increases in drug exposure with increasing dose. Pharmacokinetics consistent with a once-a-day therapy and pharmacodynamics confirming a low clinical dose for efficacy. Demonstrated anti-inflammatory effects in health volunteers with reductions in CRP and fibrinogen. NT-0249 was measured in the CSF showing high levels of brain penetration.	NodThera
VENT-02	Phase I Neuroinflammation - Parkinson's disease	Safety and tolerability	Ventus Therapeutics with Novo Nordisk in a $70 million deal
Selnoflast (RG6418) previously IZD334	Phase I: Neuroinflammation was being developed by *Inflazome* for cryopyrin-associated periodic syndrome.	Phase I complete, asset is listed on Roche's development page. No current clinical trials listed.	Roche acquired Inflazome for $447 million in 2020.
Not disclosed	Inflammatory bowel disease	IND-enabling. Two assets: one gut-restricted and the other acts systemically	Enveda
BGE-100	Neuroinflammation	IND-enabling; CNS-penetrant Preclinical benefit in atherosclerosis, hypertension, neuroinflammation and other conditions	BioAge

Drugs (TSLP1)	Stage	Efficacy/Safety	Company
Tezepelumab (Tezpire) Self-administration single pen	FDA approved for add-on maintenance treatment for patients 12 years or older with severe asthma (first biologic to be approved without phenotype or biomarker limitations). Priority Review	Granted approval after 2 registrational trials: 550 patient phase II PATHWAY and the 1061 patient phase III NAVIGATOR trial (vs placebo for 52 weeks) Both trials met their primary endpoints reducing the rate of clinical significant exacerbations (by 56% in phase III). The most common side effects were pharyngitis, arthralgia and back pain.	AstraZeneca and Amgen
CSJ117 Inhaled antibody fragment (ecleralimab)	Novartis initiated three phase II trials to evaluate uncontrolled asthma and COPD, looking to partner. NCT04410523 (phase II severe uncontrolled asthma) - terminated NCT04882124 (completed in COPD) NCT03138811 (completed in mild atopic asthma)	Met the primary endpoint and was well-tolerated (see Tezpire above).	Novartis
BSI-045B	Phase II study in atopic dermatitis (July 2023) anti-TSLP mAb Phase II for asthma	Phase I demonstrated appropriate PK and good safety profile. The phase II study aims to assess the efficacy of monotherapy as well as in combination with Dupixent.	Biosion (collaboration with CTTQ in China)
SAR443765	TSLP and IL-13 a bispecific nanobody molecule. Phase 1b in asthma	Demonstrated proof of mechanism. Well tolerated in health participants in the single and multiple dose ascending studies after iv and sc administration. SAR443765 reduced FeNo significantly compared to placebo at week 4 and reduced blood biomarkers.	Sanofi
AIO-001 Long acting mAb with twice-yearly dosing schedule	Phase II in asthma Also being studied in COPD and chronic spontaneous urticaria	Extended half line demonstrated preclinically. 6 monthly dosing.	Aiolos (just raised $245M series A out of stealth) and is licensed from Jiangsu Hengrui
UPB-001 (formerly ASP7622) Dosing every 12 weeks and every 24 weeks	Phase 1b interim results release which strongly support moving to phase 2.	Post-hoc analysis showed a decrease in blood eosinophil levels in those with > 150 cells/µL at baseline. This reduction occurred within 2–4 weeks post-dose and was maintained for ≥ 13 weeks. Showed linear and dose-proportional PK at concentrations exceeding the anticipated therapeutic threshold.	Upstream Bio

Drug	Indications/target	Trial readout date	Company/NCT
ESK001	Plaque psoriasis (STRIDE) Tyk2	Was expected to readout Q3 2023 (completed)	Alumis NCT05600036
VTX958	Crohn's disease Tyk2 inhibitor	Interim phase II data Q1 2024	Ventyx Biosciences NCT05688852
SDC-1801	Plaque psoriasis Tyk2	Phase 1a readout Q2-3 2024.	Sareum trial ID ACTRN12623000416695p
Dupilumab	NOTUS COPD trial IL4/IL-13	2024	Regeneron and Sanofi NCT04456673
AK-120	Atopic dermatitis IL-4Rα	Expected completion Q1 2024. Phase 2	Akeso NCT05048056
APG-777	Atopic dermatitis IL-13	Mid-2024 for initial SQ PK and safety data.	Apogee
TEV-48574	Ulcerative Colitis and Crohn's disease TL1A	Interim phase II data 2024	Teva NCT05499130
VENT-02	Parkinson's disease NLRP3	Phase I - Initial results are expected in the first half of 2024.	Ventus Therapeutics
Izokibep	Psoriatic arthritis IL-17A	Topline data from Phase 2b/3 PsA trial expected Q1 2024.	Acelyrin NCT05623345

Indication	TYK2	IL-17	IL-23	IL-4/13	TL1A
Dermatology	**Deucravacitinib -** psoriasis-approved (BMS) **TAK-279**-psoriasis-Ph3 (Nimbus/Takeda) **VTX958**-psoriasis-Ph2 (Ventyx)	**Ixekizumab** - psoriasis-approved (Eli Lilly) **Secukinumab** - psoriasis approved (Novartis) **Brodalumab** - psoriasis approved (Valeant Pharmaceuticals) **DC-806**-psoriasis-Ph3 (Eli Lilly)	**Tildrakizumab-asmn-**psoriasis-approved (Sun) **Ustekinumab-**psoriasis**-**approved (J&J) **Guselkumab** - psoriasis-approved **Risankizumab-**psoriasis-approved (AbbVie)	**Dupixent-**atopic dermatitis-approved (Regeneron) **CM-310** atopic dermatitis-Ph3 (Keymed Biosciences) **AK-120**-atopic dermatitis-Ph2 (Akeso) **Tralokinumab**-atopic dermatitis-approved (AstraZeneca/Leo Pharma) **Lebrikizumab-**atopic dermatitis-Ph3 (Eli Lilly) **CBP-201**-atopic dermatitis-Ph2 (Connect Biopharma)	
Rheum	**Deucravacitinib -** PsA-Ph3approved (BMS) **TAK-279-**PA-Ph3 (Nimbus/Takeda) **Brepocitinib-**SLE/DM-Ph3 (Proivant) **TLL018-**RA-Ph2 (TLL Pharma)	**Secukinumab** - AS/nr-axSpA-approved (Novartis)	**Ustekinumab -** PsA-approved-psoriasis (J&J)		
IBD	**Deucravacitinib** - UC-approved (BMS) **VTX958**-UC-Ph2 (Ventyx) **OST-122-**UC-Ph2a (Oncostellae)		**Risankizumab-**Crohns's-Ph3 (AbbVie) **Mirikizumab-**Ulceratitive Colitis-Ph3 (Eli Lilly) **Mirikizumab-**Crohn's disease-Ph3 (Eli Lilly)		**RVT-3101**-ulcerative colitis-Ph3 to begin (Roche) **MK-7240**-ulcerative colitis/Crohn's disease-Ph3 (Merck) **TEV-48574-**ulcerative colitis/Crohn's disease-Ph2 (Teva)
COPD/Asthma	N/A		N/A	**CBP-201**-Type 2 inflammatory asthma-Ph2 (Connect Biopharma)	