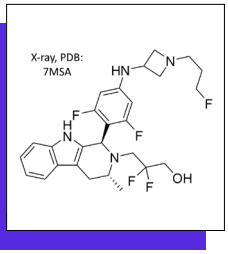
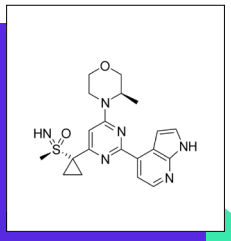
Small Molecules of the Month

July 2021
drughunter.com



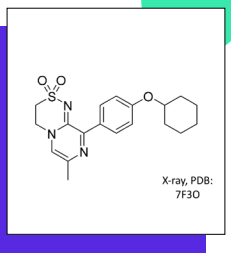
giredestrant | ERα

Selective ER degrader (SERD) + full antag.
Oral (30 mg QD), Ph. III for ER+, HER2- BC
From profiling >4k cmpds for desired MoA
Journal of Medicinal Chemistry
Genentech, San Francisco, US



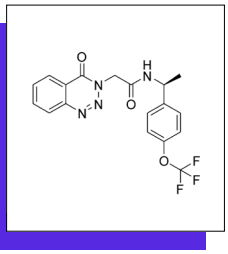
ceralasertib | ATR

ATR serine/threonine kinase inhibitor
Oral agent in Ph. II for cancer
From mTOR-program derived hit + opt.
Clinical Cancer Research
AstraZeneca, Cambridge, UK



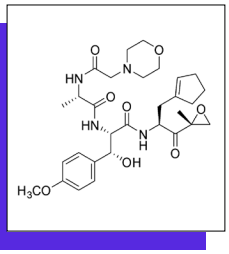
TAK-653 | AMPA-R

Potent AMPA-R potentiator w/ min. agonism
6 mg PO QD in Ph. II (withdrawn, biz decision)
From biochemical screen + opt.
Scientific Reports
Takeda Pharmaceutical, Fujisawa, JP



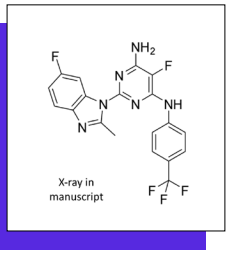
TAK-041 | GPR139

GPR139 GPCR agonist
Oral (40-160 mg QD) Ph. II for schizophrenia
625k-cmpd cell-based screen (21 nM hit) + opt
Journal of Medicinal Chemistry
Takeda, San Diego, US



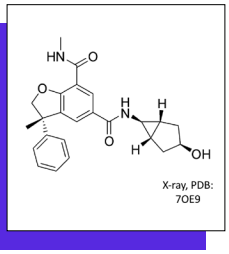
KZR-616 | LMP2/7

Covalent immunoproteasome inhibitor
Subcutaneous agent in Ph. I/II for SLE and LN
Designed from proteasome inhibitors
Drug Metabolism and Disposition
Kezar Life Sciences, San Francisco, US



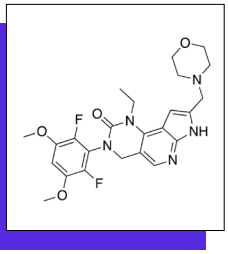
PTC596 | tubulin

CNS-penetrant tubulin-binder (colchicine site)
Oral agent in Ph. I for leiomyosarcoma
Not a P-gp substrate, formerly BMI-1 inh.
Molecular Cancer Therapeutics
PTC Therapeutics, South Plainfield, US



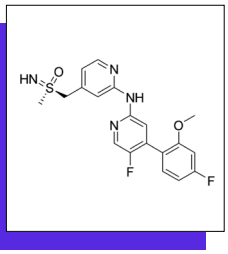
GSK852 | BD2

>1000x BD2-selective BET bromodomain inh.
Orally available in dog
Rational design from prior lead
Journal of Medicinal Chemistry
GlaxoSmithKline, Stevenage, UK



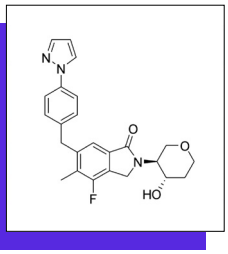
pemigatinib | FGFR2

Oral FGFR1/2/3 kinase inhibitor
Approved in oncology, 13.5 mg QD (14d+, 7d-)
From focused screen of ~20k cmpds and SBDD
Journal of Medicinal Chemistry
Incyte Corporation, Wilmington, US



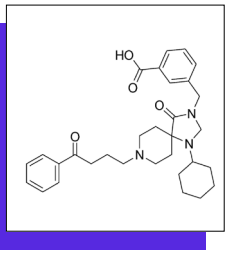
VIP152 | CDK9

>50x family-selective CDK9 kinase inhibitor
IV agent (5-30 mg QW) in Ph. I for cancer
Scaffold hop from atuveciclib
Journal of Medicinal Chemistry
Bayer, Berlin, DE / Vincerx, Palo Alto, US



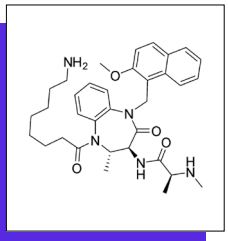
TAK-071 | M1R

Low α- M1R positive allosteric modulator
7.5 mg+ PO QD in Ph. II for Parkinson's
From eval. of M1R PAMs w/ low cooperativity
British Journal of Clinical Pharmacology
Takeda Pharmaceutical, Cambridge, USA



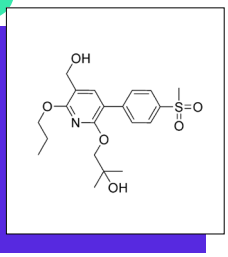
TAK-906 | D2/D3

Peripherally-restricted D2/D3 antagonist
Oral agent for gastroparesis in Ph. II
Up to 100 mg PO BID
JPET, Clinical Pharmacology
Altos Therapeutics / Takeda, Cambridge



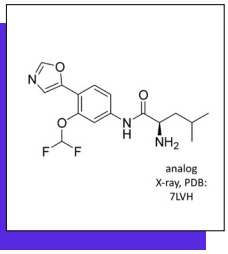
"compound 10" | XIAP

XIAP E3-ligase degrader via SM ubiquitylation
Novel mechanism of induced degradation
From derivatization of XIAP-binder
Journal of the American Chemical Society
Genentech, San Francisco, US



"compound 10" | COX-2

Gut-restricted, selective COX-2 inhibitor
In vivo showed no inhibition of gut COX-2
From modification of etoricoxib
Journal of Medicinal Chemistry
Janssen, Spring House, US



"compound 59" | AAK1

Brain penetrant AAK1 kinase inhibitor
Efficacious in neuropathic pain model
From biochemical screen of in-house library
Journal of Medicinal Chemistry
Bristol Myers Squibb, Wallingford, US

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