

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 8-K

**CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934**

**Date of Report (Date of earliest event reported):
January 10, 2022**

RECURSION PHARMACEUTICALS, INC.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

001-40323
(Commission
File Number)

46-4099738
(IRS Employer
Identification No.)

41 S Rio Grande Street
Salt Lake City, UT 84101
(Address of principal executive offices, including zip code)

(385) 269-0203
(Registrant's telephone number, including area code)

Not Applicable
(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A common stock, \$0.00001 par value per share	RXXR	Nasdaq Global Select Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 7.01 Regulation FD Disclosure.

On January 10, 2022, Recursion Pharmaceuticals, Inc. released an updated investor presentation. The investor presentation will be used at the JP Morgan Healthcare meeting and from time to time in meetings with investors. A copy of the presentation is attached hereto as Exhibit 99.1.

The information furnished pursuant to Item 7.01 on this Form 8-K, including Exhibit 99.1 attached hereto, shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference into any other filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such a filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
99.1	Investor presentation of Recursion Pharmaceuticals, Inc. dated January 10, 2022.
104	Cover Page Interactive Data File (formatted as Inline XBRL)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

RECURSION PHARMACEUTICALS, INC.

Date: January 10, 2022

By: /s/ Christopher Gibson

Name: Christopher Gibson

Title: Chief Executive Officer

Exhibit 99.1

Early January Interim Update

January 10th, 2022



Forward Looking Statements

This presentation and any accompanying discussion or documents may contain information that includes or is based upon "forward-looking statements" within the meaning of the Securities Litigation Reform Act of 1995. These forward-looking statements are based on our current expectations, estimates and projections about our industry, management's beliefs and certain assumptions we have made. They are neither historical facts nor assurances of future performance, are subject to significant risks and uncertainties, and may turn out to be wrong. For a discussion of factors that could affect our business, please refer to the "Risk Factors" sections in our Prospectus filed with the SEC on April 16, 2021 and in our periodic filings with the SEC. This presentation does not purport to contain all the information that may be required to make a full analysis of the subject matter. We undertake no obligation to correct or update any forward-looking statements.

Recursion is a 21st century biopharma company

Recursion is a clinical stage **Pharmatech** company **Mapping and Navigating** biology designed to bring better medicines to patients faster and at lower cost via an **Internal Pipeline** and **Partnerships**



The Leading Pharmatech

>**150+** Biologists, chemists and drug developers

>**150+** Data scientists, software programmers, and engineers



Mapping & Navigating

13 Petabytes of proprietary biological and chemical data generated in-house

>**200B** inferred biological relationships to mine using our maps of biology



Internal Pipeline

4 Programs entering Ph2 or Ph2/3 in 1H 2022 and 1 program entering Ph1 in 2H 2022

>**10** programs in late discovery or preclinical

Dozens of programs in early discovery



Partnerships

>**\$230M** in upfront payments and investment to date from partners

>**\$500M** in performance/data-sharing milestones possible in intermediate term

>**\$13B** in project milestones across up to 50+ programs possible

Royalties on all partnered programs

The biopharmaceutical industry faces pressure amidst declining efficiency



Political sentiment the world over, and increasingly in the U.S., against high drug prices will create additional pressure



The number of new drug approvals is up only 47% over the last 25 years and first in class drug approvals have fallen 17% over the past decade²



\$2.4B of R&D per new drug is 2.1 times more than a decade ago¹



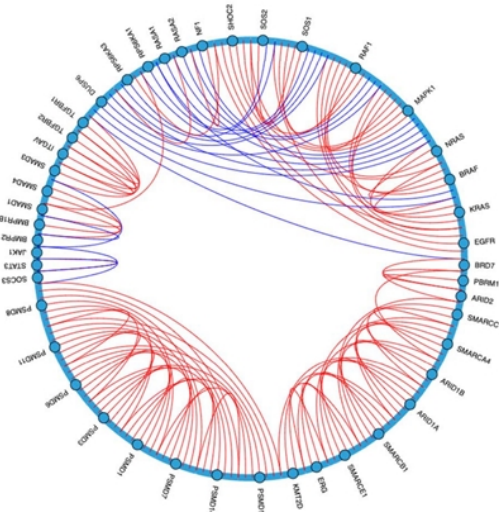
60% of sales growth of the top selling drugs is accounted for by price increases³

¹Deloitte, "Measuring the Return from Pharmaceutical innovation" (2020 and 2015 editions).

²Mullard, A. Nature Reviews Drug Discovery 2021. ³Biopharma Dive, 2018 (leerink) and Brown, D and Wobst H J Med Chem 2021 (FIC)

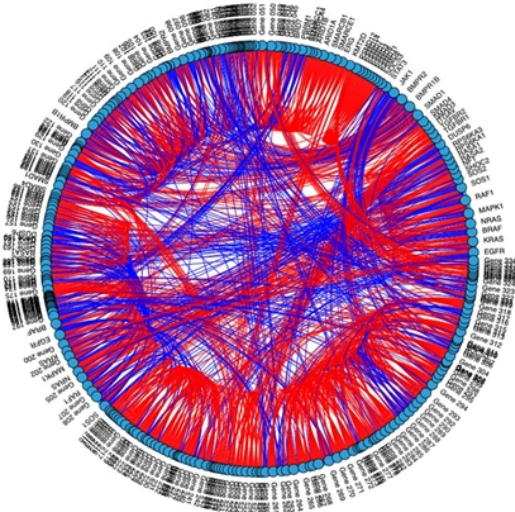
Historical tools and the limits of human cognition led to biological reductionism

Traditional Approach to Biology



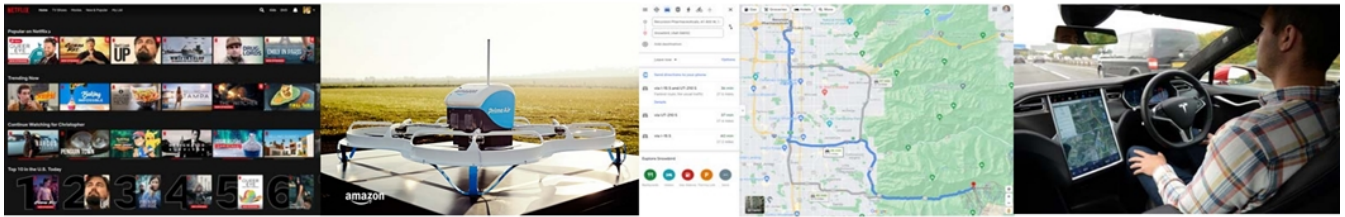
Well-known primary relationships found by the Recursion OS between key members of five pathways: JAK/STAT | SWI/SNF | TGFβ | RAS | Proteasome

Recursion's Approach to Biology

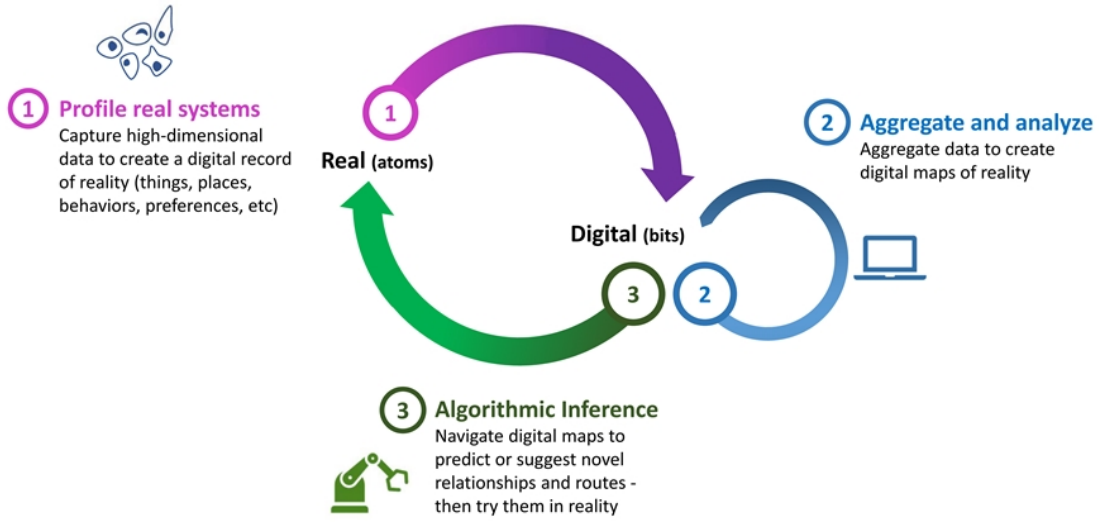


All primary relationships found by the Recursion OS between key members of five pathways: JAK/STAT | SWI/SNF | TGFβ | RAS | Proteasome

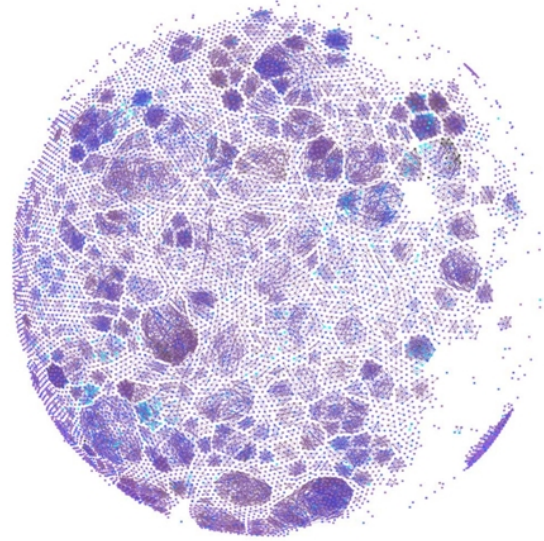
Technology has reshuffled major industries by bringing order and prediction to complex systems



An underlying theme of many disruptive and successful technology companies is an iterative loop of data and algorithms

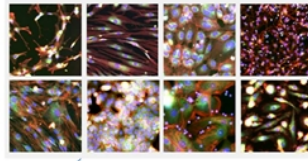


How we build maps of biology



Automated Execution at Scale

Up to
2.2 M
Experiments per week



Digitization of Complex Biology

13 PB
Proprietary High-Dimensional
Biological Data

Biological and Chemical Diversity

38
Human cell types

1M
Small Molecules

130K
Arrayed
CRISPR guides

1K
Cytokines
& soluble factors



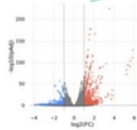
Recursion OS
Enables quality, reliability,
repeatability and scale



ML/AI-Based Analysis

Top 100
Supercomputer on Earth

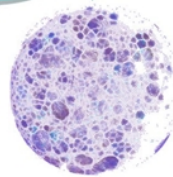
Novel Efficacy and Insights At Scale



High-Dimensional Validation

Up to
6K
Near whole exomes per week

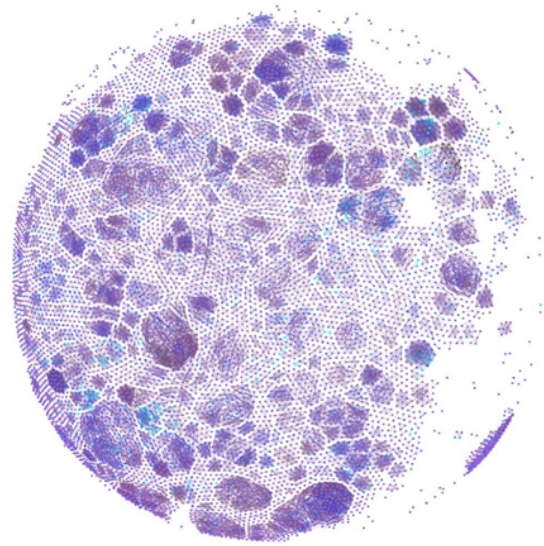
5K
Proteomics panels in 2021

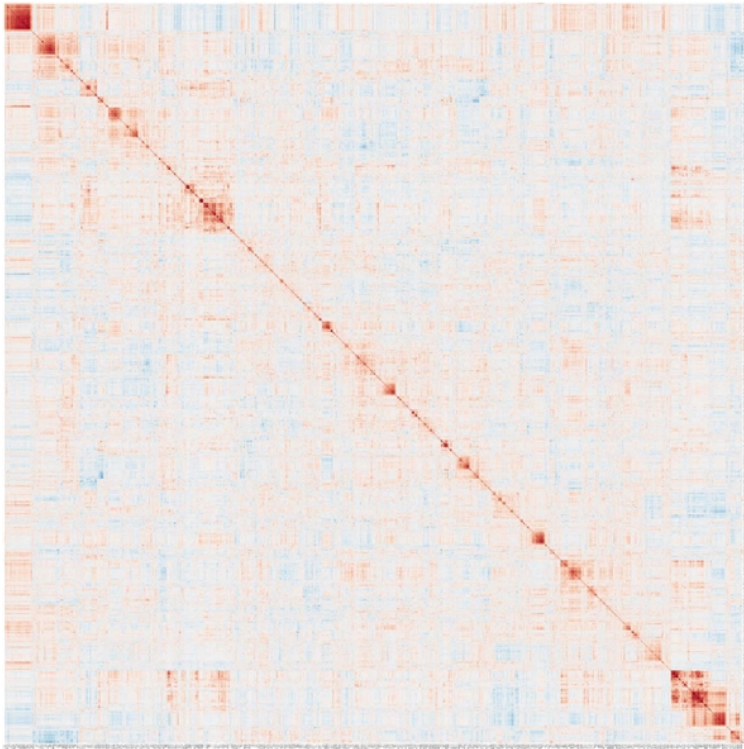


ML/AI-Based Exploration

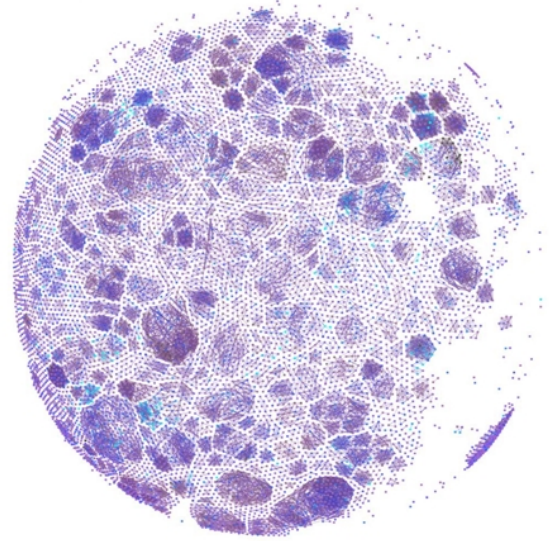
200B
ML-enabled hypotheses

How we navigate our maps of biology
to rapidly identify novel insights that
can drive better programs faster

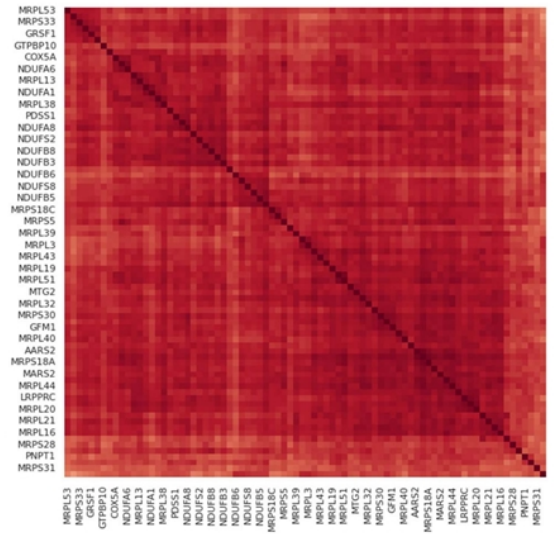
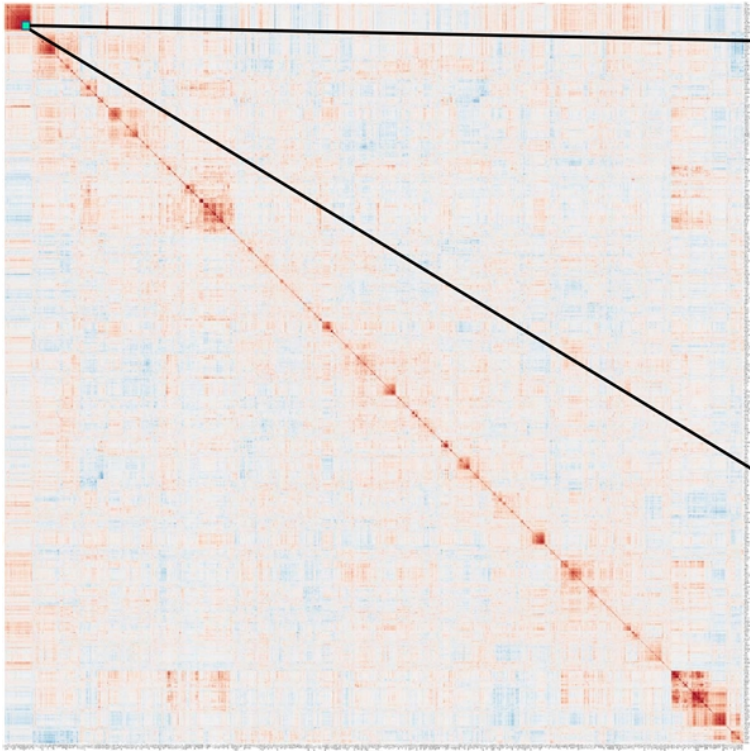




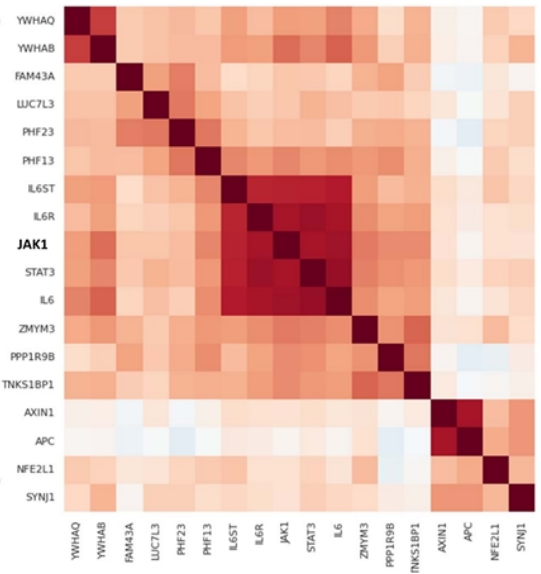
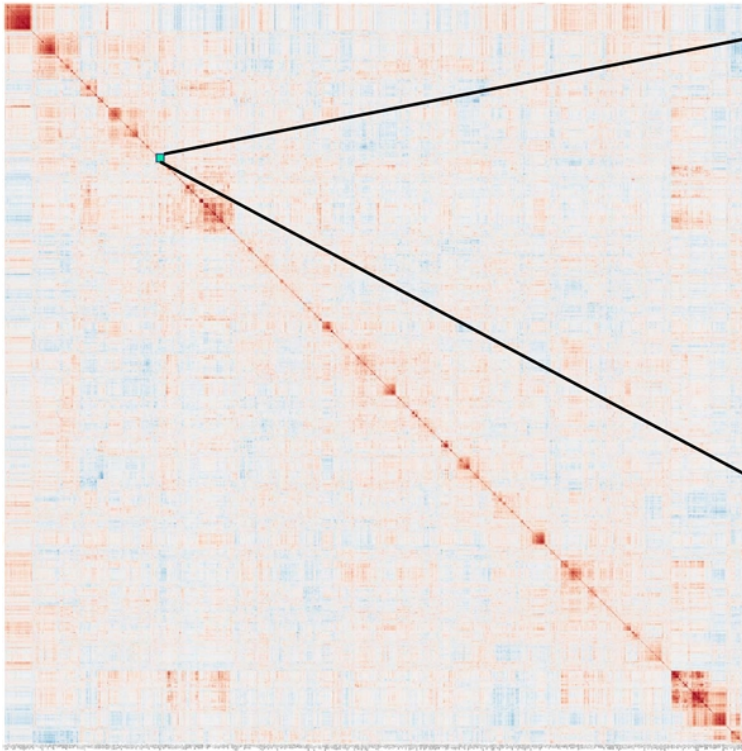
Recursion visualizes its Maps in different ways. Below is a Map of thousands of new chemical entities, clustered by chemical similarity and colored by potency, which demonstrated a strong anti-inflammatory response on the Recursion OS



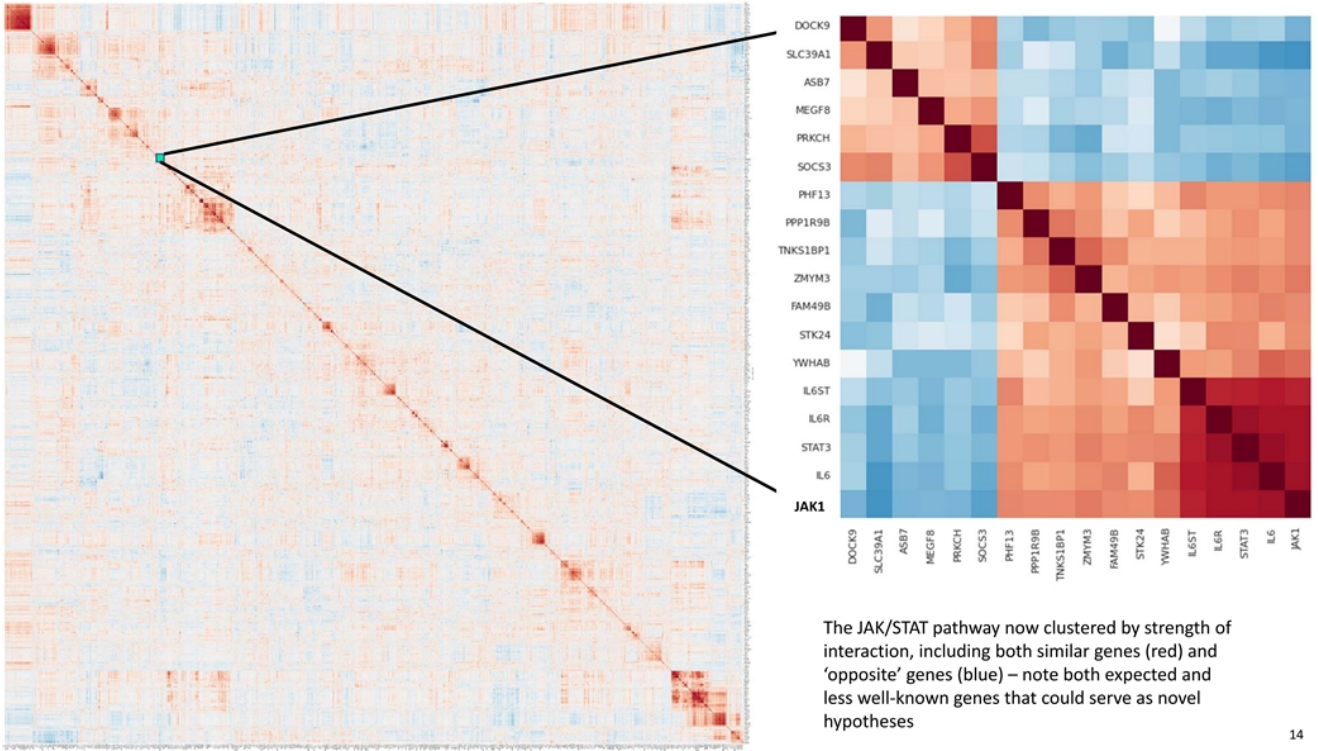
To the left, shared for the first time ever, is whole-genome arrayed CRISPR KO Map generated in primary human endothelial cells



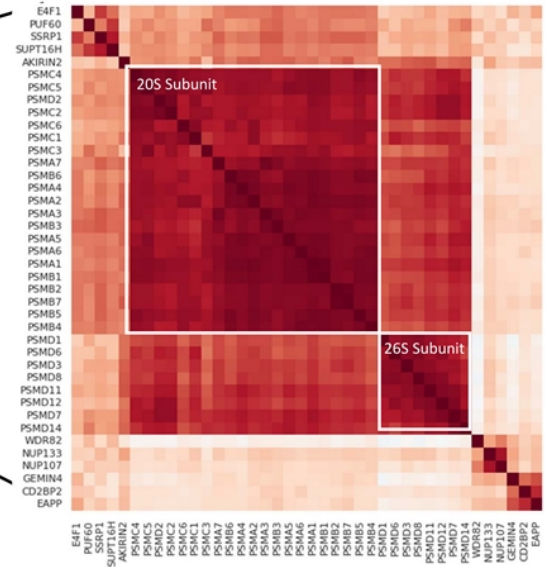
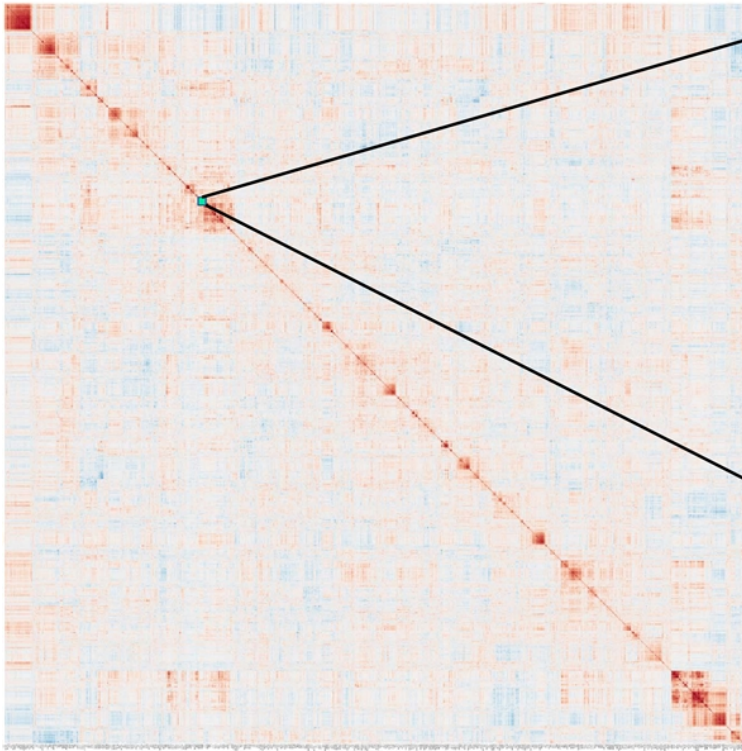
Many known mitochondrial-related genes cluster together along with a few less well-known genes



Many known JAK/STAT genes cluster together along with a few less well-known genes

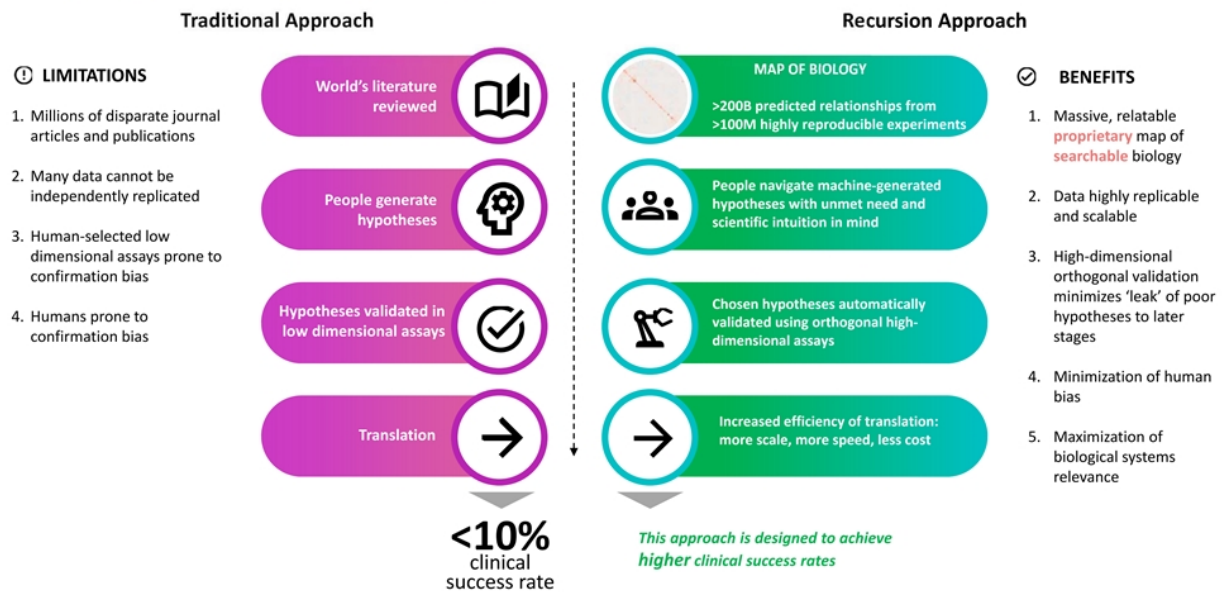


The JAK/STAT pathway now clustered by strength of interaction, including both similar genes (red) and 'opposite' genes (blue) – note both expected and less well-known genes that could serve as novel hypotheses

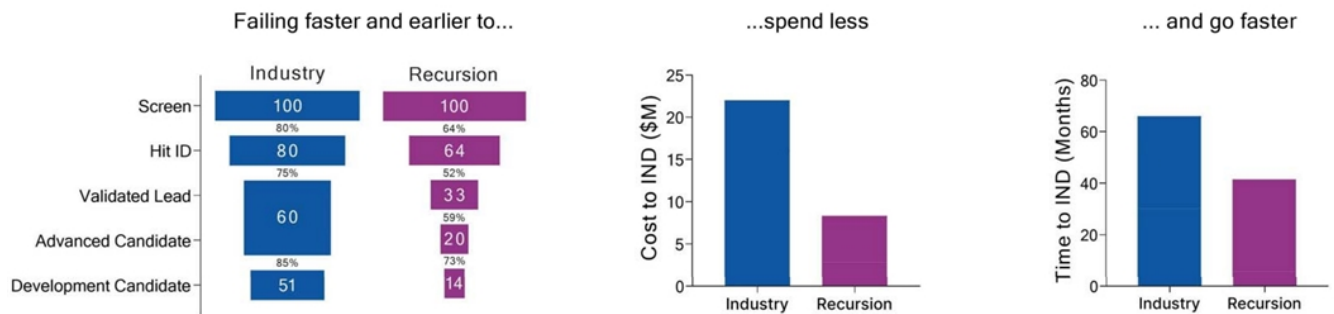


The 20S and 26S proteasomes are another of hundreds of expected clusters that give confidence in this Map, one of many we have built – however the most exciting elements of each map are the tens of thousands of unknown and unexplored high-confidence relationships

A departure from the traditional approach towards mapping and navigating biology

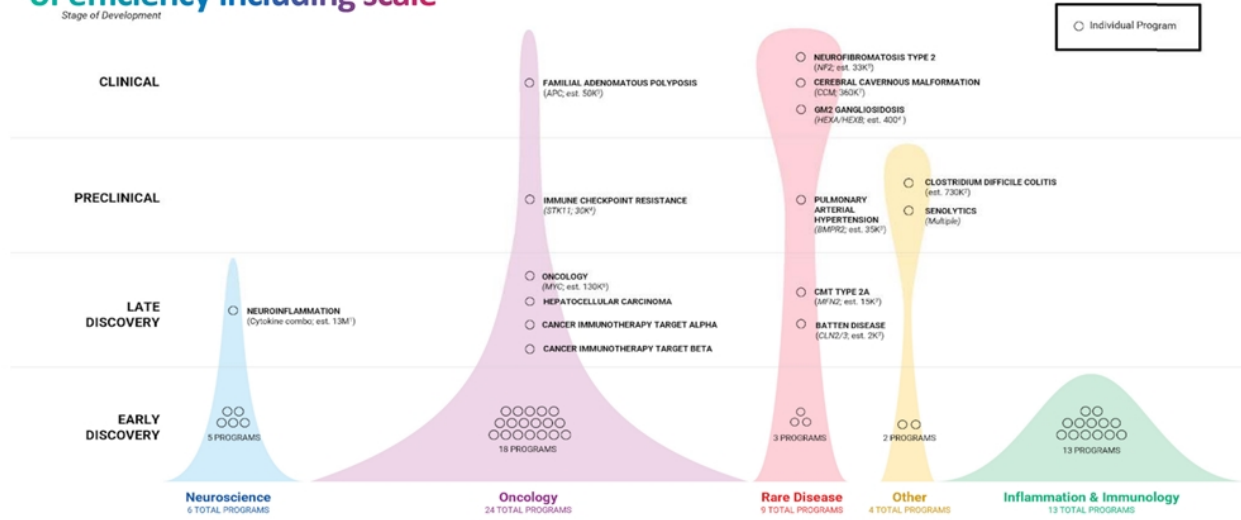


Mapping and Navigating Biology has demonstrated leading indicators of efficiency including speed and cost benefits



Preliminary data shown is the average of all our programs since late 2017. All industry data adapted from Paul, et al. Nature Reviews Drug Discovery, (2010) 9, 203-214

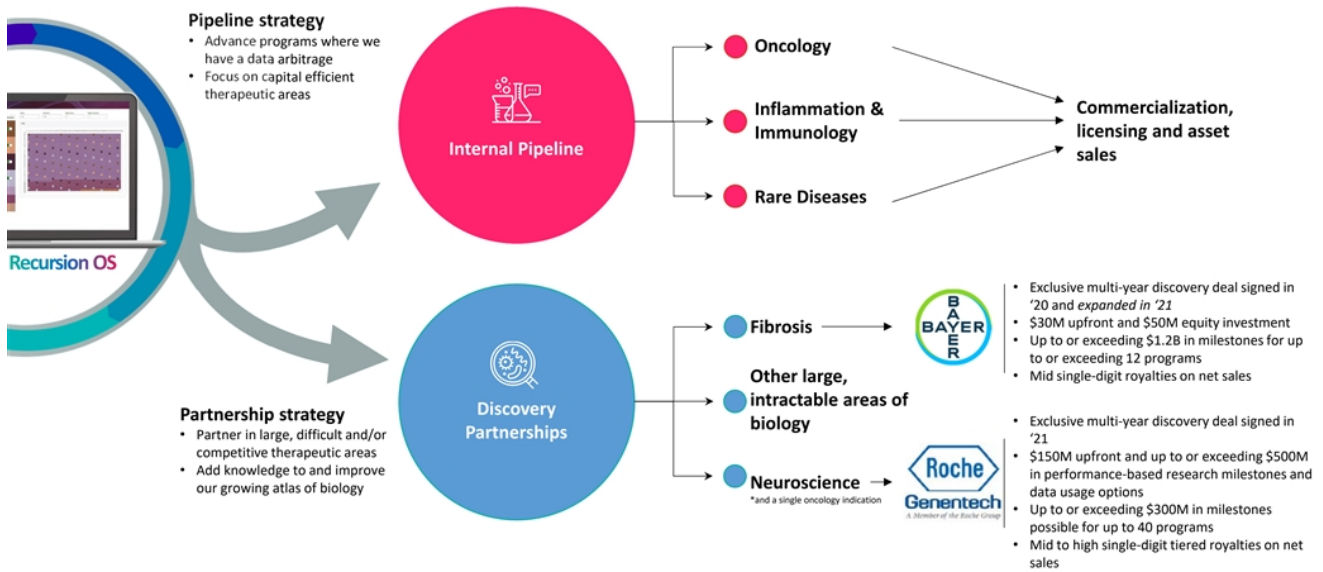
Mapping and Navigating Biology has demonstrated leading indicators of efficiency including scale



Data as of end of Q3, 2021

EUS is defined as France, Germany, Italy, Spain and the UK. (1) Our program has the potential to address a number of indications within neuroinflammation, including multiple neurodegenerative diseases totalling at least 13 million patients in the US and EUS. (2) 730,000 annual incidence in US and EUS. (3) Annual US and EUS prevalence (4) Worldwide prevalence (5) Annual US and EUS incidence for all NF2-driven meningiomas. (6) Our program has the potential to address a number of indications driven by MYC alterations, totalling 120,000 patients in the US and EUS annually. We have not finalized a target product profile for a specific indication. (7) Hereditary and sporadic symptomatic population.

We harness the value and scale of our Maps of Biology using a capital efficient business strategy



Clinical Program 1 – REC-994 for Cerebral Cavernous Malformation (CCM)

PREVALENCE


360,000 US + EUS

CAUSE

LOF mutations in genes *CCM1*, *CCM2* & *CCM3*, key for maintaining the structural integrity of the vasculature due to unknown mechanisms


PATHOPHYSIOLOGY

Vascular malformations of the CNS leading to focal neurological deficits, hemorrhage and other symptoms



OUR REASON TO BELIEVE

Efficacy in Recursion OS as well as functional validation via scavenging of massive superoxide accumulation in cellular models; reduction in lesion number with chronic administration in mice

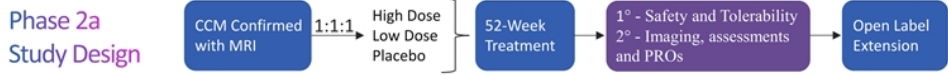


KEY ELEMENTS

- Targeting both sporadic and familial symptomatic CCM
- Patients with *CCM1*, *CCM2*, and *CCM3* mutations
- Once daily oral dosing
- US and EU Orphan Drug Designation granted



Julia – living with CCM



Clinical Program 2 – REC-2282 for *NF2*-Mutated Progressive Meningioma

INCIDENCE


33,000 US + EU5

CAUSE

LOF mutations in *NF2* tumor suppressor gene


PATHOPHYSIOLOGY

Inherited rare CNS tumor syndrome leading to loss of hearing and mobility, other focal neurologic deficits



OUR REASON TO BELIEVE

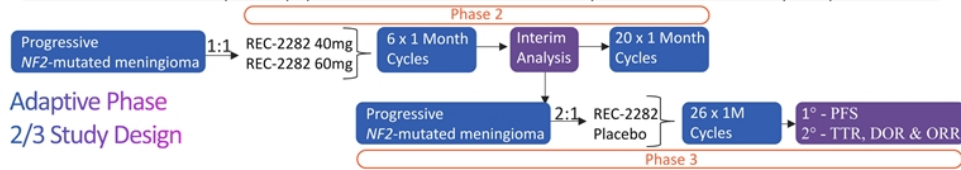
Efficacy in Recursion OS, cellular, & animal models; suppression of aberrant ERK, AKT, and S6 pathway activation in a Phase 1 PD Study in *NF2* patient tumors



KEY ELEMENTS


- Targeting familial and sporadic *NF2* meningioma patients
- Adult and adolescent patient populations
- Oral bioavailability and CNS exposure together are unique among clinical-stage HDAC inhibitors
- Potentially reduced cardiac toxicity compared to class

Adaptive Phase 2/3 Study Design



```

graph TD
    subgraph Phase2 [Phase 2]
        A[Progressive NF2-mutated meningioma] -- 1:1 --> B[REC-2282 40mg / REC-2282 60mg]
        B --> C[6 x 1 Month Cycles]
        C --> D[Interim Analysis]
        D --> E[20 x 1 Month Cycles]
    end
    subgraph Phase3 [Phase 3]
        F[Progressive NF2-mutated meningioma] -- 2:1 --> G[REC-2282 / Placebo]
        G --> H[26 x 1M Cycles]
        H --> I["1° - PFS  
2° - TTR, DOR & ORR"]
    end
    E --> F
    
```



Ricki – living with *NF2*

Clinical Program 3 – REC-4881 for Familial Adenomatous Polyposis (FAP)

PREVALENCE


50,000 US + EU5

CAUSE

Inactivating mutations in the tumor suppressor gene *APC*


PATHOPHYSIOLOGY

Polyps throughout the GI tract with extremely high risk of malignant transformation



OUR REASON TO BELIEVE

Efficacy in the Recursion OS shows that specific MEK 1/2 inhibitors had a specific effect in context of *APC* LOF. Subsequent mouse model *APC^{tmh}* showed potent reduction in polyps and dysplastic adenomas



KEY ELEMENTS

- Targeting Classical FAP patients (w/ *APC* mutation)
- Benign polyps and dysplastic adenomas
- Oral Dosing & Gut-Biased
- US Orphan Drug Designation granted



Clinical Program 4 – REC-3599 for Infantile GM2 Gangliosidosis

PREVALENCE


400 US + EU5

CAUSE

LOF mutations in lysosomal beta-hexosaminidase subunit genes leading to neuronal GM2 accumulation


PATHOPHYSIOLOGY

GM2 + lipofuscin accumulation leads to complete neurological disability and death in the first few years of life



OUR REASON TO BELIEVE

Efficacy on the Recursion OS of a unique PKCβ/GSK3β dual inhibitor stimulating cellular autophagy and modulating lysosomal biogenesis. Reduction of disease-specific activity in patient derived cells



KEY ELEMENTS

- Tay-Sachs Disease (HEXA), Sandhoff Disease (HEXB), and GM2 Activator Deficiency Patients
- Complementary MOA for potential combination with genetic therapies
- Human safety database with established chronic dosing
- Liquid formulation suitable for G-tube dosing



Amelie – lived with GM2



Clinical Program 5 – REC-3964 for Recurrence or Prevention of Clostridium difficile Colitis

<p>INCIDENCE</p> <p>730,000 US + EU5</p>	<p>CAUSE</p> <p>Release of C. Difficile toxins by colonizing bacterium causes degradation of colon cell junction, toxin transit to bloodstream, and morbidity to host</p>
<p>PATHOPHYSIOLOGY</p> <p>Highly recurrent infectious disease with severe diarrhea, colitis, and risk of toxic megacolon, sepsis, and death</p>	<p>OUR REASON TO BELIEVE</p> <p>Efficacy on the Recursion OS identified a new chemical entity for prophylaxis and recurrent C. difficile infection via glycosyl transferase inhibition with potential to be both orally active and gut-biased</p>
<p>KEY TPP ELEMENTS</p> <ul style="list-style-type: none">• Orally active small molecule toxin inhibitor• Non-antibiotic approach with potential for combination with SOC and other therapies for recurrent disease• Designed for gut-biased pharmacology to target infection in the GI tract while reducing systemic exposure and potential systemic effects• Not expected to negatively impact the gut microbiome	



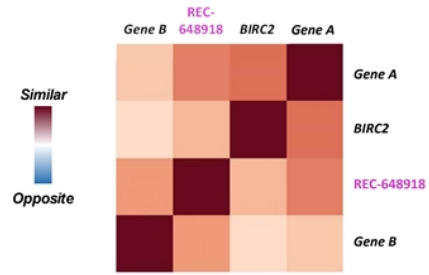
Colleen – overcame recurrent C diff.

Target α : Small molecule to enhance anti-PD-(L)1 response in the presence of checkpoint resistance mutations

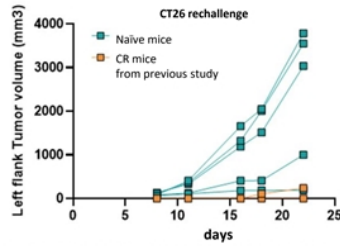
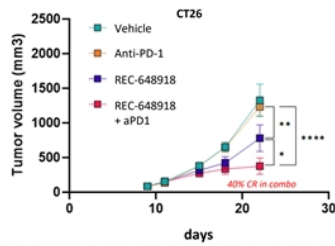
Tumor-intrinsic immune resistance

STK11
Target Alpha
Target Beta
More...

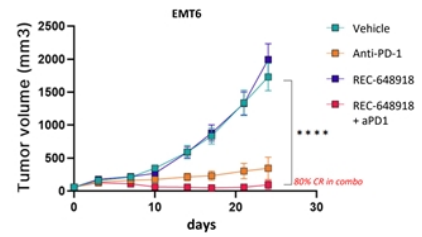
- **Goal:** Identify novel compounds capable of re-sensitizing tumors with tumor-intrinsic resistance factors to checkpoint therapy
- **Phenomap insight:** Novel compound (**REC-648918**) identified with similarity to knockout of potential immunotherapy resistance gene targets (*Gene A*, *Gene B*)
- **Result:** Reduction in tumor growth vs. anti-PD-1 alone in both CT26 checkpoint resistance and EMT6 models (including 40% and 80% complete response in combination in each model respectively)



Efficacy demonstrated in CT26 checkpoint resistance (left) mouse model; complete response (CR) mice show minimal tumor growth when rechallenged (right)



Efficacy demonstrated in EMT6 mouse model



CT26: mouse colon carcinoma. REC-648918 was dosed PO, QD for 5 weeks at 100mg/kg. Anti-PD-1 was dosed IP, BIW for 5 weeks at 10mg/kg. 10 mice per group, dosing initiated when tumors reached ~ 80 mm³. * p<0.05 ** p<0.01 **** p<0.0001; * Combination treatment in EMT6 resulted in 8 CR and 8 rejections on re-challenge

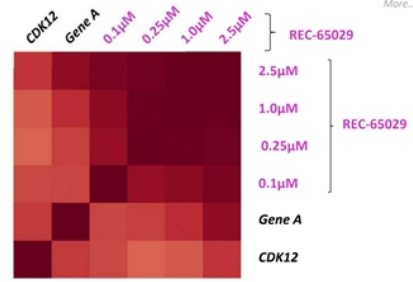
CDK12: Small molecule for the potential treatment of HRD-negative cancers resistant to PARP inhibitors

Tumor-targeted precision therapeutics

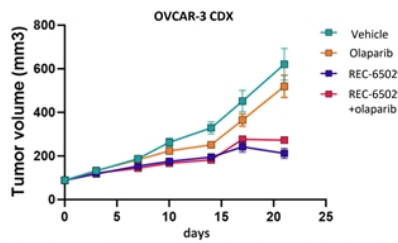
Hepatocellular Carcinoma
MYC
CDK12
More...

- **Goal:** Identify novel compounds capable of sensitizing HRD-negative ovarian and other tumors to PARP inhibition
- **Phenomap insight:** Inhibition of target *Gene A* (for example, with **REC-65029**) may mimic inhibition of CDK12 while mitigating toxicity due to CDK13 inhibition
- **Result:** Single agent and combo activity with olaparib in an HRD-negative ovarian cancer CDX and PDX models with durable response

Similar
Opposite

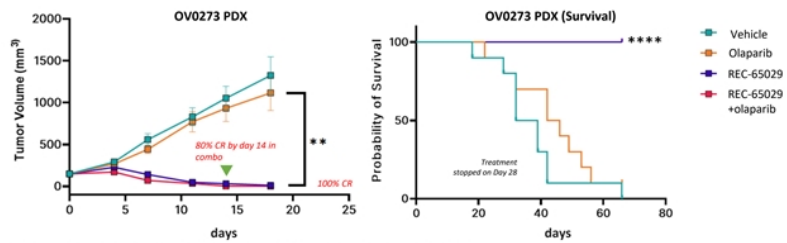


Single agent activity in olaparib-resistant CDX mouse model



26

Single agent and combination (with olaparib) in an HRD-negative ovarian cancer PDX model with durable response



26

OVCAR-3 CDX – animals dosed with REC-65029 for 5 days at 100 mg/kg BID, a holiday from days 6-9 (due to body weight loss) and dosing resumed at 85 mg/kg BID; OV0273 PDX – REC-65029 dosed at 85 mg/kg PO BID, olaparib dosed at 90mg/kg PO QD; ** p<0.01 **** p<0.0001

What it takes to make this happen – a new kind of team and culture at the interface

Team Credentials

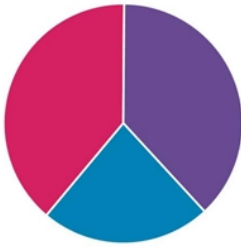
400+ Employees today

41% Advanced degrees

Gender: % Women

45% Below VP

45% VP and above

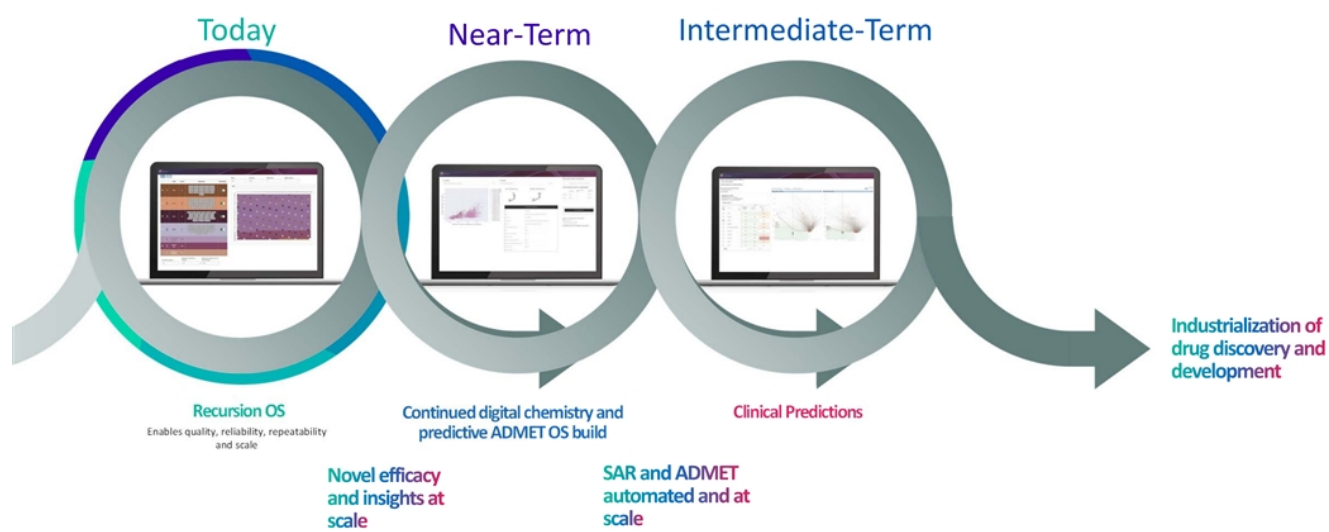


- Life Sciences - biology, chemistry, development, etc.
- Tech - Data science, software engineering, automation, etc.
- Strategic Operations

27



The roadmap



What to expect from Recursion

Clinical Programs

Near-Term Milestones

- Rec-994 for CCM Ph2a clinical start in Q1
- Rec-2882 for NF2 Ph2/3 clinical start in Q1
- Rec-4881 for FAP Ph2 clinical start in Q2
- Rec-3599 for GM2 clinical start in Q2
- Rec-3964 for C diff. IND and Phase 1 start in 2H
- Additional INDs and Clinical Starts
- Option Exercises for Partnership Programs

Medium-term milestones

- Multiple POC readout(s) for AI-discovered programs
- Potential additional partnership in large, intractable area of biology
- Additional option exercises for partnership programs
- Recursion OS Begins to move to Autonomous Map Building and Navigation with Automated Chemical Synthesis, Digital Chemistry and Predictive ADMET Tools
- In-House Small Molecule Manufacturing Capabilities come On-Line

Strong Financials

- \$579M in cash, equivalents & investments with no substantial debt at end Q3, 2021
- Does not include \$150M upfront from Roche/Genentech deal
- Recognition of partnership upfronts over 2-3 years suggests possible annual revenue of \$60-\$80M

IMPACT

 RECURSION



Appendix: Our leadership team brings together experience & innovation to build the OS for scaling biopharma discovery

Board of Directors



CHRIS GIBSON, PHD
Co-founder & CEO
RICE UNIVERSITY OF UTAH S



DEAN LI, MD/PHD
Recursion Co-founder, President of Merck Research Labs
MERCK UNIVERSITY OF UTAH



BLAKE BORGESON, PHD
Recursion Co-founder, Board member Machine Intelligence Research Institute
RICE MIRI



ZAVAIN DAR
Partner, Lux Capital
LU+ S



ZACHARY BOGUE, JD
Partner, Data Collective
DC



ROBERT HERSHBERG, MD/PHD
Former EVP CSO & BD, Celgene
Celgene



TERRY-ANN BURRELL, MBA
CFO & Treasurer Beam Therapeutics
J.P.Morgan Beam



R. MARTIN CHAVEZ
Vice-Chair of 6th Street Financial. Former CFO/CIO at GS
6 SIXTH STREET Goldman Sachs

Executive Team



CHRIS GIBSON, PHD
Co-Founder & CEO
RICE UNIVERSITY OF UTAH S



TINA LARSON
President & COO
Roche Genentech ACHAGEN



SHAFIQUE VIRANI, MD FRCS
Chief Corp Dev Officer
bridgebio Roche Genentech



MASON VICTORS
Chief Product Officer
Roche



RAMONA DOYLE, MD
Chief Medical Officer
GILEAD Roche BLADE Genentech



HEATHER KIRKBY
Chief People Officer
intuit



BEN MABEY
Chief Technology Officer
Roche



RON ALFA, MD/PHD
SVP of Research
S



MICHAEL SECORA, PHD
Chief Financial Officer
LAURION PRINCETON UNIVERSITY MIT



LOUISA DANIELS, JD
Chief Legal Officer & General Counsel
Pfizer elan

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Appendix: A biotechnology company scaling more like a technology company



Forward program growth










Significant program growth

- Growing economic opportunity
- Reduction of binary risks

Year	2017	2018	2019	2020
Total Phenomic Experiments (Millions)	2.2	7.6	23.9	55.6
Data (PB)	0.5	1.8	4.3	6.8
Cell Types	7	12	25	36
Unique Perturbations ¹ (Millions)	0.02	0.1	0.5	1.3
Total Chemical Library ² (Thousands)	3	24	106	706
<i>In Silico</i> Chemistry Library (Billions)	0	0	0.015	3
Inferential Relationships ³ (Billions)	NA	NA	NA	13
Clinical Assets	0	1	2	4
Cost Per Experiment ⁴ (\$)	0.63	0.45	0.36	0.33

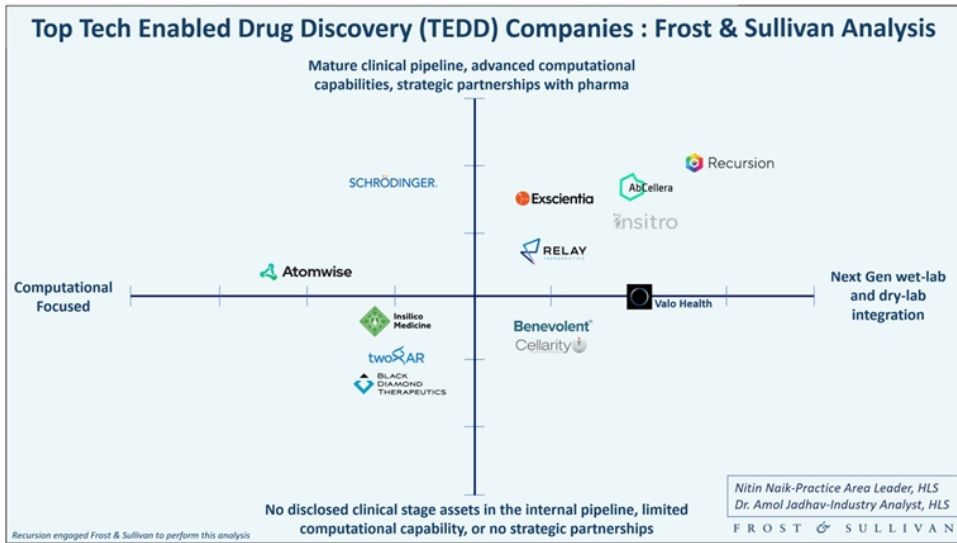
(1) 'Unique Perturbations' refers to the number of gene, soluble factor, cell and/or compound combinations physically explored. (2) Includes approximately 500,000 compounds from Bayer's proprietary library. (3) 'Inferential Relationships' refers to the number of Unique Perturbations that have been predicted using our Recursion Map. (4) 'Cost Per Experiment' refers to the average adjusted direct cost to perform one phenomic experiment (defined as one well per perturbation) and is inclusive of consumable, compound and labor costs.

Appendix: Comparison to relevant platform companies

Company	Early Discovery – Preclinical	Clinical / Commercial Assets
 moderna	13	18
 BIONTECH	10	18
 CUREVAC كوارثنا ههنا	11	3
 bridgebio	7	12
 SCHRODINGER	7	(multiple through collaboration)
 RELAY THERAPEUTICS	1	2
 Recursion	>50	4

Pipeline data from company websites as of 11/08/2021. Trademarks are the property of their respective owners and used for informational and educational purposes only.

Appendix: Recursion is the leading pharmatech company



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