PARADIGM BIOPHARMA

39th Annual JP Morgan Healthcare Conference | January 11 - 14, 2021

Chief Executive Officer

Paul Rennie



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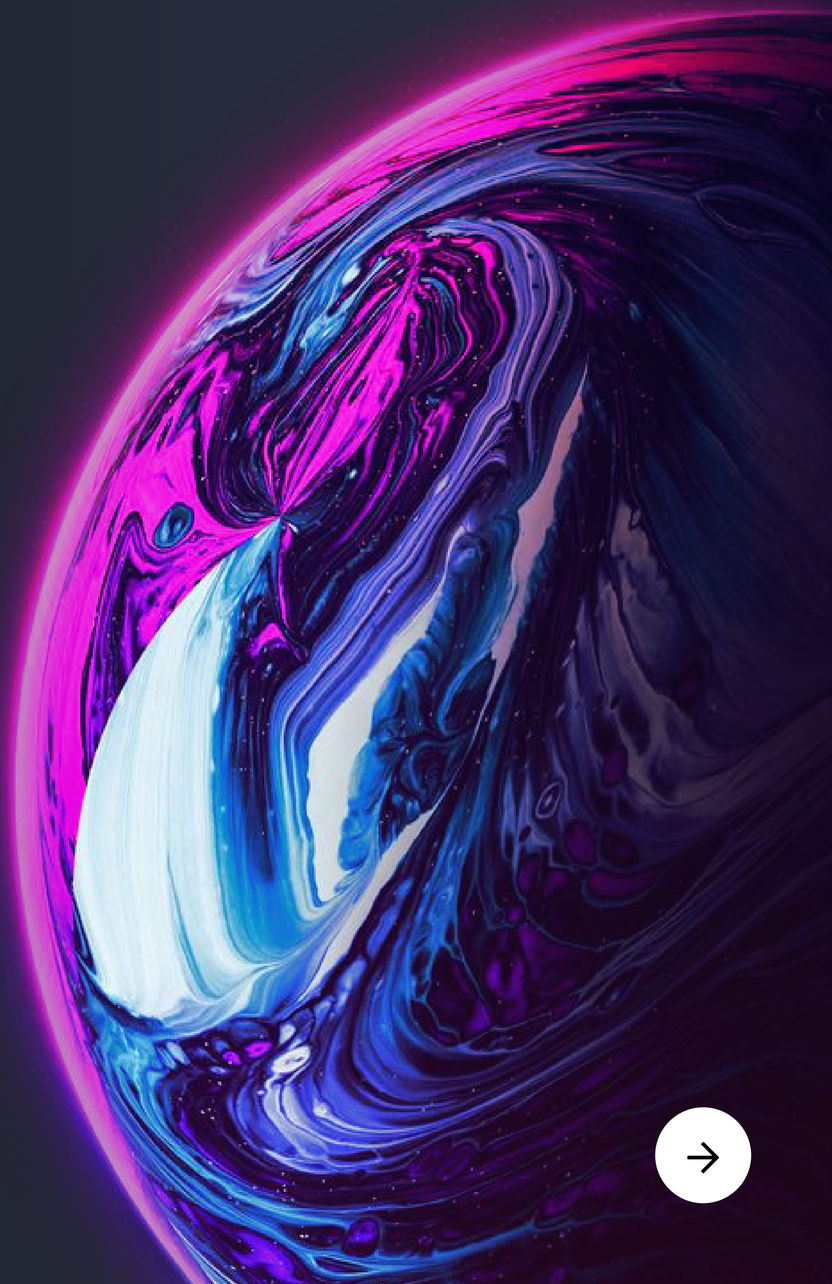
Changing the paradigm around where the greatest potential lies.

Paradigm Biopharma ASX:PAR is approaching unmet needs from a completely different angle.

As repurposing experts, we are developing new solutions by identifying under-utilised molecules and unlocking their full value.

Combing cutting-edge science with industry-leading experience, our team is uniquely qualified to connect the promise a molecule has shown in the past with the proof that we were incapable of gathering before today.

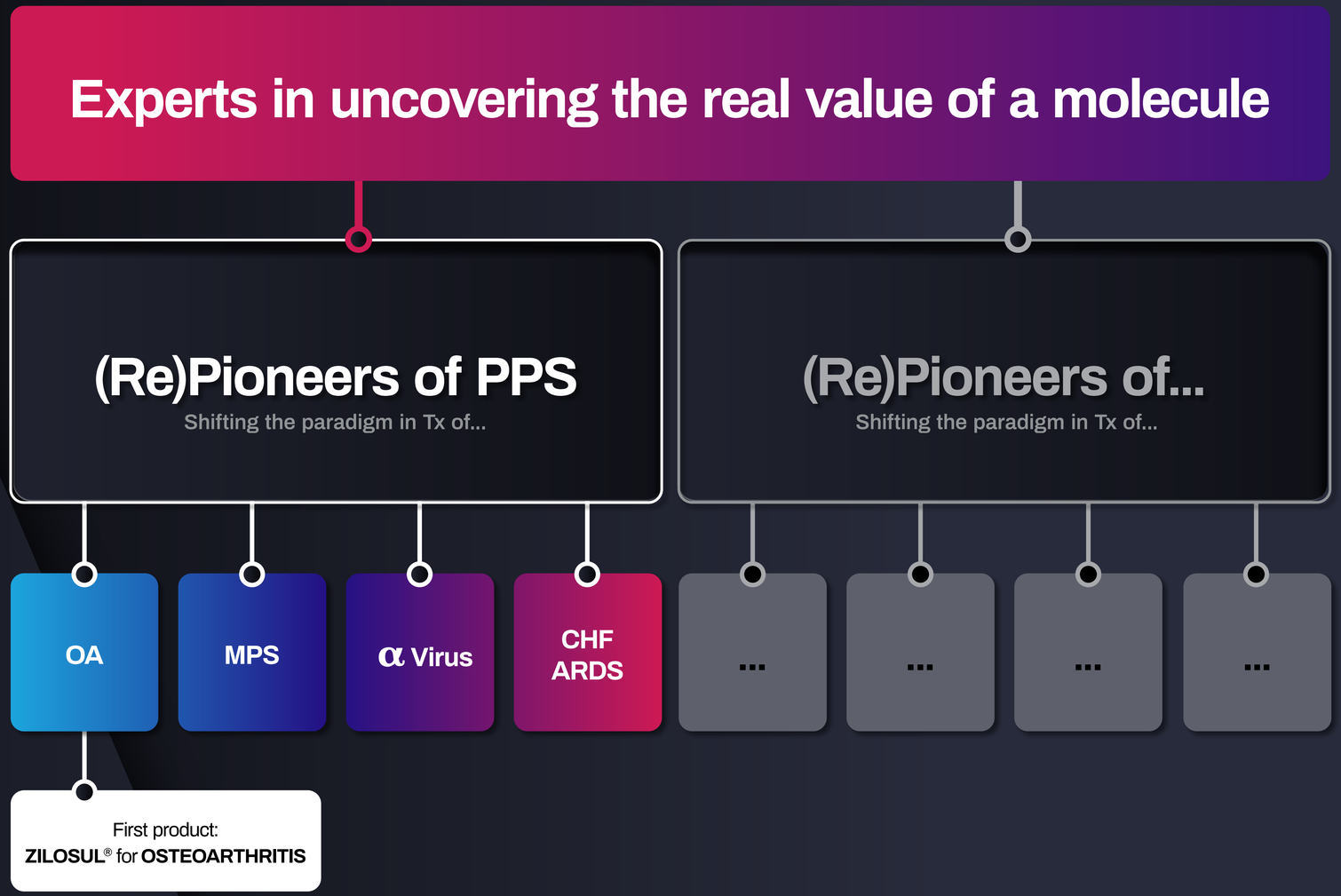
We are challenging conventional wisdom. We are looking at disease states with fresh eyes. And we are finding connections never considered before.



Paradigm Biopharma is a commercially focused drug repurposing company.

Our approach:

- Take an existing, approved drug with demonstrated safety in its approved indication,
- Repurpose to a new patented therapeutic application with high unmet need.
  - Reduced time, cost and risk



Blockbuster market opportunity

Zilosul® meets a significant unmet need in osteoarthritis

Total prevalence of OA in key markets

72M+
and growing

USA | CAN | EU5 | AUS

Knee and Hip

69%

OA patients dissatisfied with current treatments[1]

81%

Target uptake: 10% dissatisfied market[1]

Zilosul® indicative price: US$2500 per year[2]

Rheumatoid Arthritis

- Prevalence: 7.2M patients
- 2020 market valuation: ~$33Bn

1. National Institute of Health; Emerging drugs for osteoarthritis; Hunter DJ and Matthews G 16(3): 479–491; 2011 September.
2. Pricing elasticity research commenced.

EU5: Germany, UK, Spain, France, Italy

Recent OA Transactions

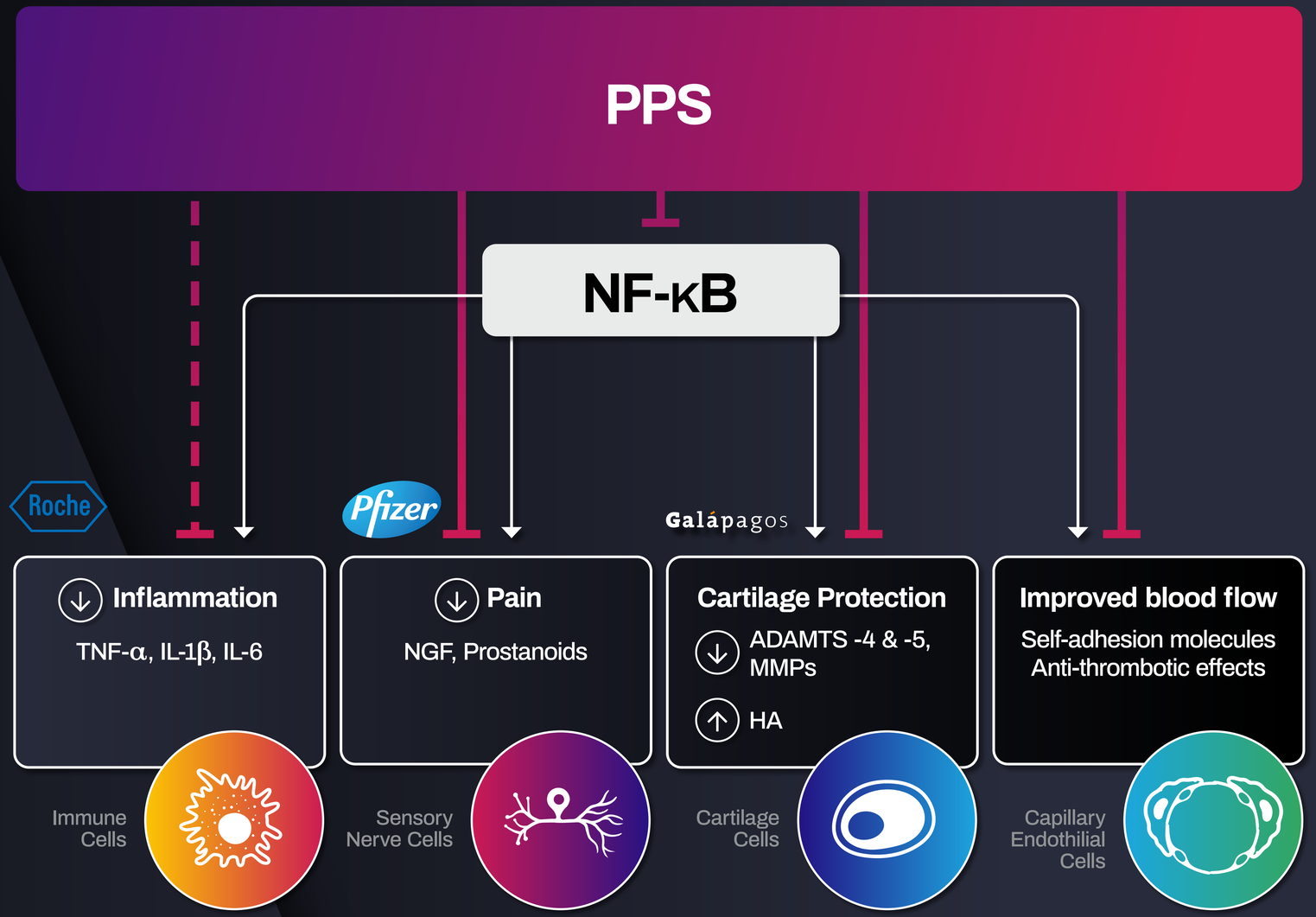
Highlights Pharma Interest In OA

COMPANIES	COMPOUND	REGION	UPFRONT	TOTAL VALUE	STATUS
Pfizer / Lilly	Anti-NGF	Global	US$200m	US$1.8bn	NDA Submitted
REGENERON / teva	Anti-NGF	Global	US$250m	US$1.25bn	Phase 3
flexion / SANOFI	Corticosteroid	Global	Take-over*	US$1.0bn*	Commercialised
AMGEN / janssen	Anti-NGF	Global (ex Japan)	US$50m	US$435m	Discontinued
		Global Av.	**US$166m**	**US$1.12bn**	
Galápagos / SERVIER	ADAMTS-5 Inhibitor	EU	Unknown	US$346m	Discontinued
TissueGene, Inc. Cell Technologies / Mitsubishi Tanabe Pharma	Gene therapy	Japan	US$24m**	US$434m**	Handed Back
TissueGene, Inc. Cell Technologies / mundipharma	Gene therapy	Japan	US$27m	US$591m	Phase 3
REGENERON / Mitsubishi Tanabe Pharma	Anti-NGF	Asia	US$55m	US$325m	Phase 3
		Regional Av.	**US$35m**	**US$424m**	

Sources: Bloomberg, company filings; *Sanofi-Flexion take-over rumoured – Fierce Biotech; **Mitsubishi handed back rights to TissueGene who executed deal with MundiPharma

Confident of clinical success

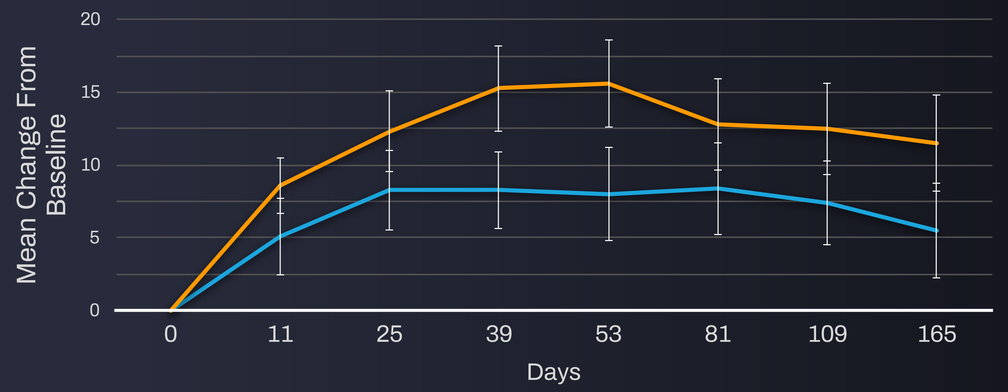
- **Multiple modes of action**
- Previous Phase IIb, SAS and EAP experience
- Global harmonised clinical trial consultation



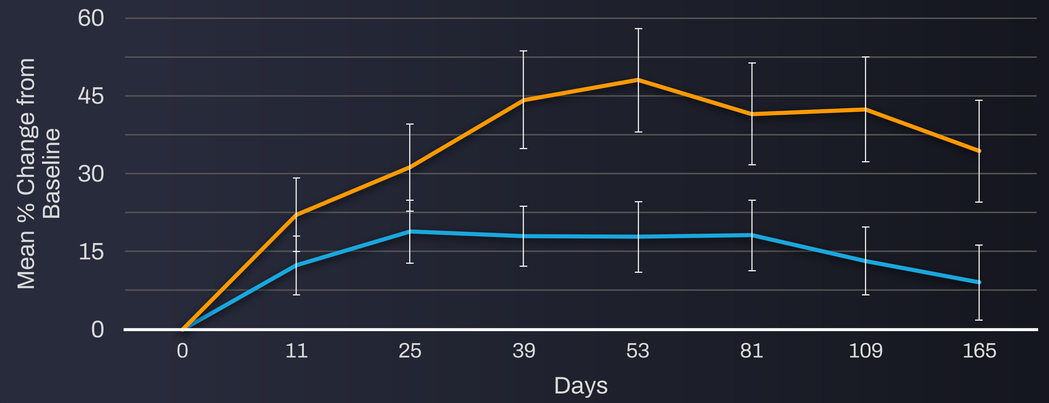
Summary Phase 2B data

Phase 2B double blinded, placebo controlled trial. N=112

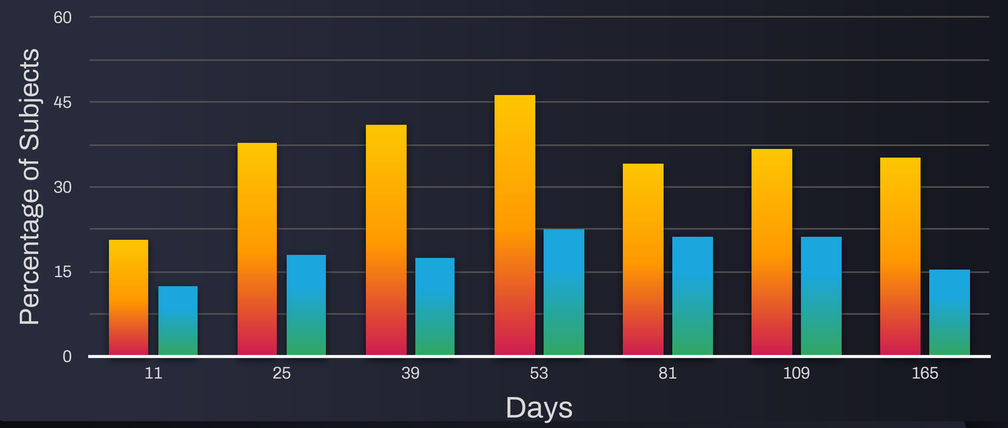
PAIN – Mean Change KOOS Pain from BL (PPP NRS 4-6)



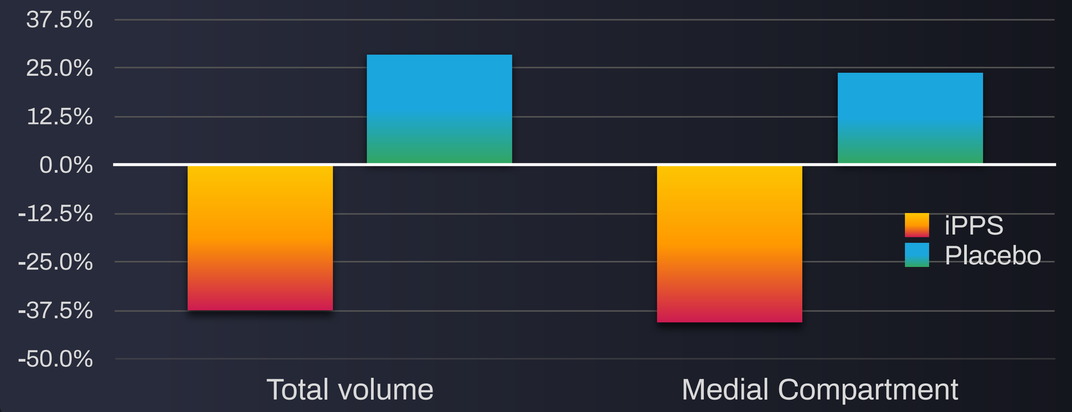
FUNCTION – Activities of Daily Living (PPP NRS 4-6)



CLINICALLY MEANINGFUL - % of subjects with >50% reduction in KOOS pain from BL- (PPP NRS 4-6)

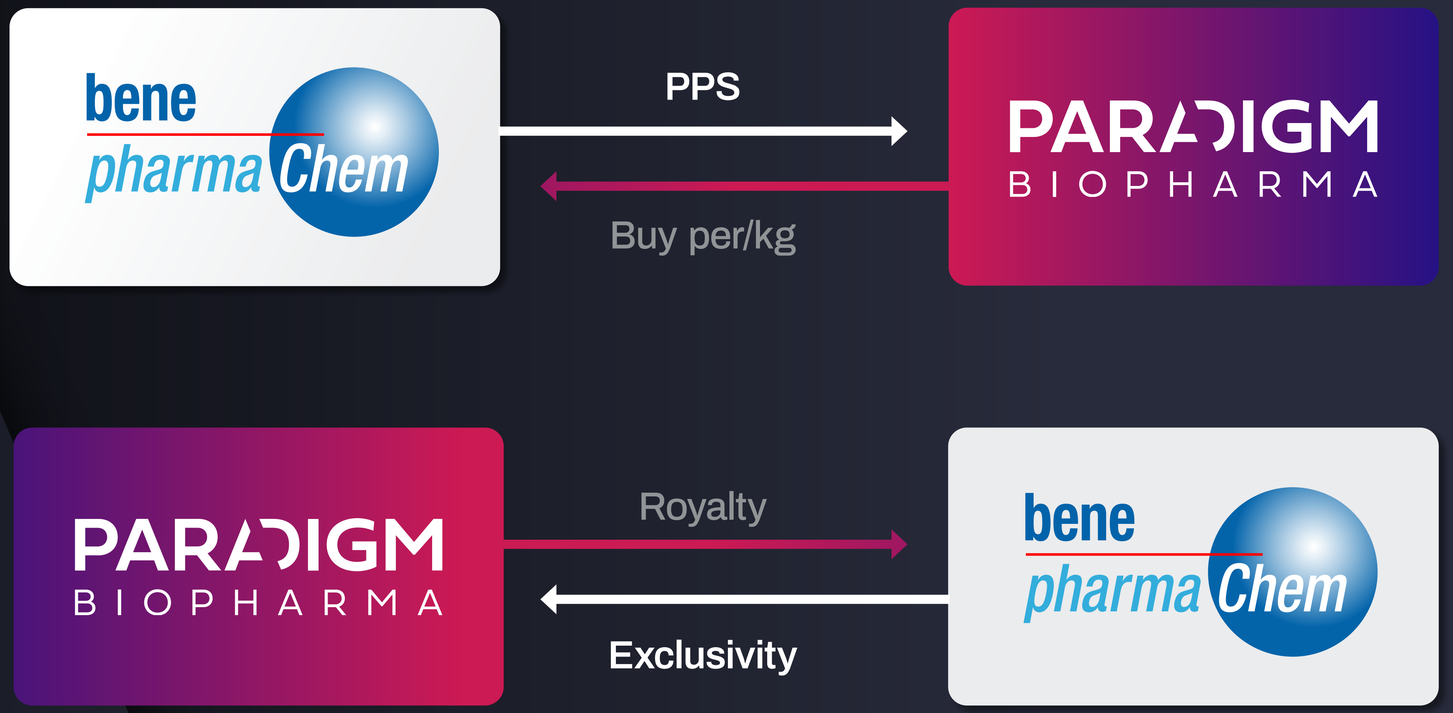


STRUCTURAL CHANGES - Median % Change from Baseline BMEL Volume in Knee (PPP NRS 4-6)



Exclusive Supply & Manufacturing

- **Long term exclusive supply agreement** with bene pharmaChem GmbH
- Bene pharmaChem: original developer of PPS and **only FDA-approved manufacturer**.
- Johnson & Johnson have been sourcing PPS from bene for a different application (bladder pain)
- Manufacturing methods are highly complex and a well kept trade secret
- Agreement grants exclusive supply of only FDA approved PPS for Paradigm's orthopaedic and respiratory programs
- Paradigm to pay bene pharmaChem small single digit (2% on net sales) royalty on commercial sales



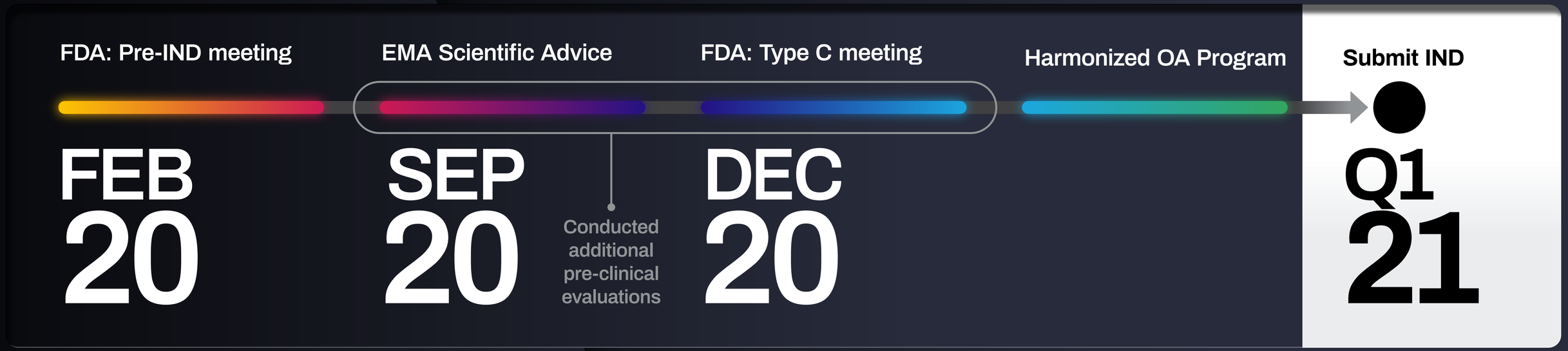
Strong Patents & IP Position

Multi-faceted IP protection increases barriers to entry for potential competitors

- Patent protection using PPS for new indications
- **Minimum life on patents is 2030 and beyond for more recent patents** i.e. 2035 - 2040
- Established regulatory exclusivity and trademarks
- Patents for MPS (ex Japan) + Orphan Status
- Patent applications for Ross River virus and Chikungunya virus
- Patent applications for osteoarthritis
- Patent for Heart Failure indication
- Prosecuting new patent applications

Feedback from EMA + FDA:

Global Harmonisation

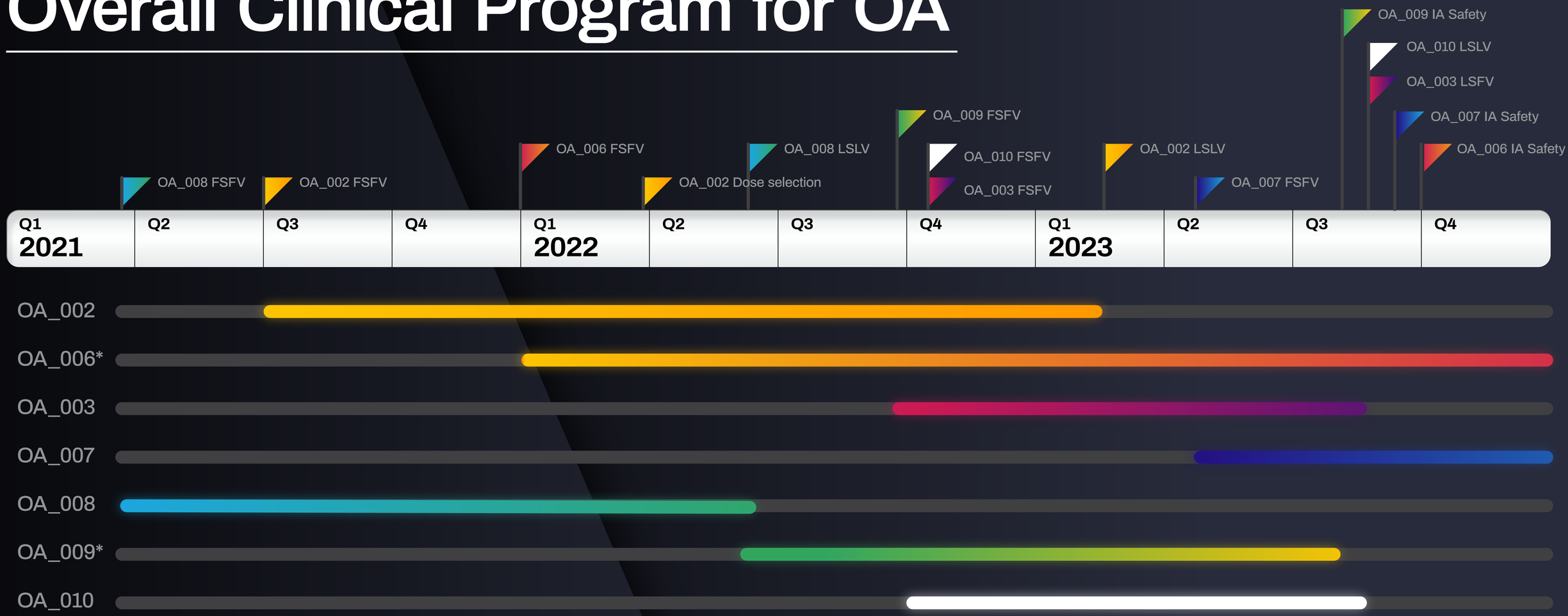


Revised Clinical Trial Program will:

- Confirm minimally effective dose
- Evaluate increased patient numbers to account for potential dropouts related to COVID-19 and aged population, and meet regulatory requirements to collect adequate safety data of iPPS
- Measure confirmed clinical endpoints of WOMAC pain & function
- Confirm Phase III pivotal & confirmatory study
- Improve and expand label for simultaneous registration globally

De-risks overall project

Overall Clinical Program for OA

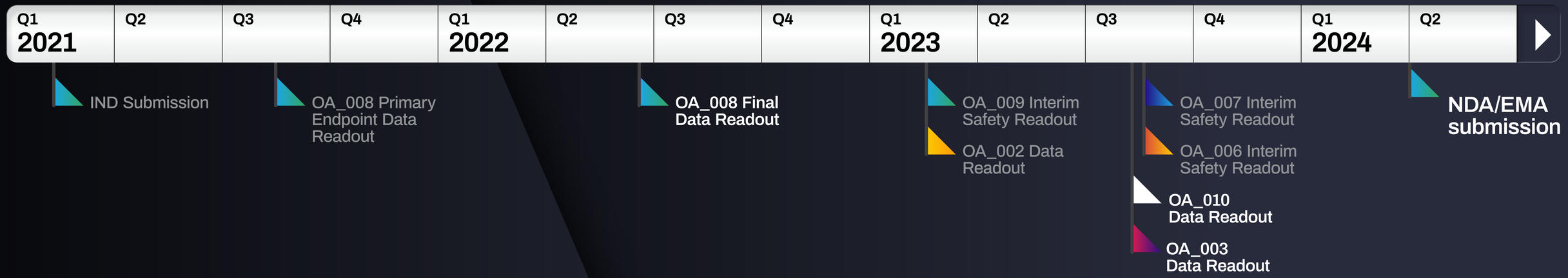


NB: Reflects current plans and may be subject to change

*Safety data cut only, study continues to end 2024

FSFV = First Patient Treated | LSLV = Last Subject Treated | IA Safety = Safety Interim Analysis

Milestones and Newsflow



NB: Reflects current plans and may be subject to change

Summary

- Repurposing experts - developing new solutions and addressing unmet needs
- **PPS - first asset - with multi-faceted IP and patent protection**
- Exclusive, scalable supply agreements
- Unique multi-modal action - rich pipeline
- **Lead indication in OA - block-buster opportunity**
- De-risked program through harmonised regulatory and clinical strategy

For more information please visit:
paradigmbiopharma.com
or email any queries to
investorrelations@paradigmbiopharma.com