

Transforming life for people with Parkinson's

Interim report Q1 2022



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IRLAB: Accelerating development and growth

- ✓ Strong development of operations, strong cash position enabling investment in pipeline
- ✓ In partnership with a global pharma company
- ✓ Two programs with exciting prospects in clinical Phase IIb development
- ✓ Preclinical development candidates towards clinical Phase I
- ✓ Interest in IRLAB assets is high and growing

IRLAB is well
positioned
to deliver

Financial summary of Q1 2022

Comment on
Q1 2022

Highlights

- SEK 368m in cash
- Net sales about SEK 7m activated cost for Phase IIb/III study with mesdopetam and SEK 2m for services to Ipsen
- Cost increasing due to higher activity in clinical trials and preparations for Phase I with preclinical assets

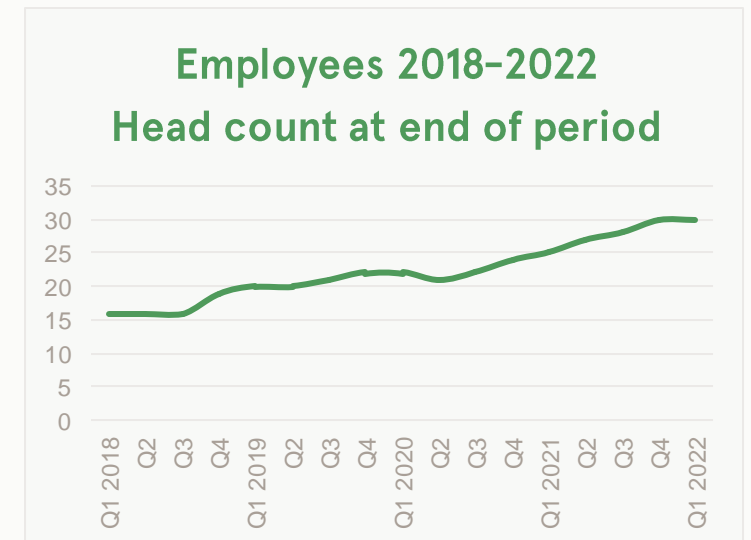
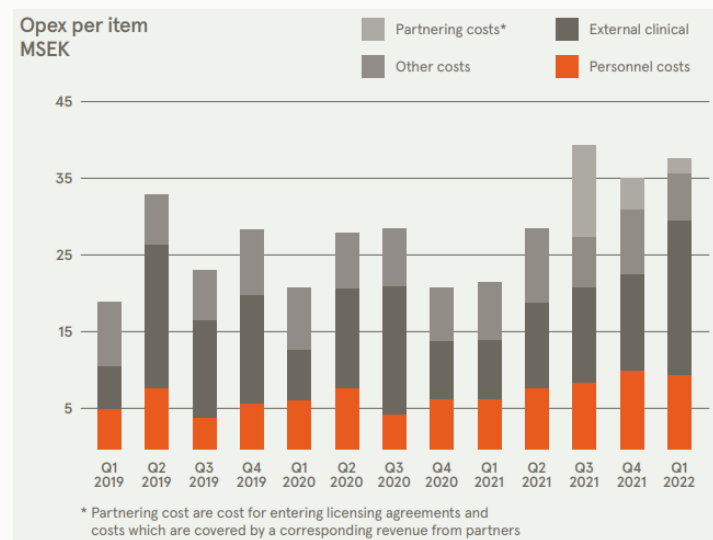
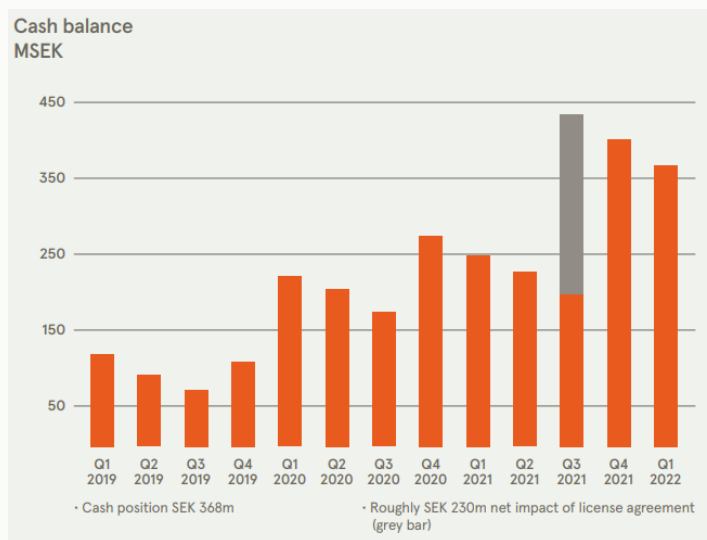
January–March 2022
Compared with January–March and full year 2021

	Jan–Mar 2022	Jan–Mar 2021	Jan–Dec 2021
Net sales	9,042	0	207,782
Operating profits/loss	-29,088	-19,967	52,576
Profit/loss for the period	-29,170	-20,041	51,781
Earnings per share before and after dilution, attributable to the parent company's shareholders	-0.56	-0.39	1.00
Number of shares at the end of the period, including subscribed but not yet registered shares	51,748,406	51,748,406	51,748,406
Cash and cash equivalents	368,047	253,905	401,897
Equity per share	7.16	6.34	7.72
Equity ratio, %	85	93	85
Average number of employees	26	19	22
Of which in R&D	23	18	20

Financial highlights of Q1 2022

Comment on
Q1 2022

- Investing in clinical Phase IIb programs according to plan
- Investing in preclinical development, advancing IRL757 and IRL942 to clinical Phase I
- Cost increase coupled to portfolio development according to plan and previous communication
- Strong cash position in line with long term strategy



Mesdopetam licensing pays off – investing in pipeline

IRLAB following its strategy to become a next level business-oriented company

- Innovative R&D
- Expanded clinical operations
- Professional IR and business development

Operational focus

- Mesdopetam Phase IIb – Focus on study completion
- Pirepemat Phase IIb – Prevention of falls, study started
- Advancing preclinical programs into Phase I:
 - IRL942 to improve cognitive function & brain health
 - IRL757 to treat apathy
- P003 project to transform treatment of core symptoms of Parkinson's – key assets to develop IPR acquired in April 2022
- Continued development of ISP

Portfolio transforming treatments in Parkinson's and beyond

Comment on
Q1 2022



Mesdopetam *

PARKINSON – LEVODOPA-INDUCED DYSKINESIAS (LIDS)



PARKINSON – PSYCHOSIS



Pirepemat

PARKINSON – IMPAIRED BALANCE AND FALLS

PARKINSON – DEMENTIA

IRL942

NEUROLOGY– IMPROVE COGNITIVE FUNCTION

IRL757

NEUROLOGY– APATHY

P003

PARKINSON – DOPAMINE SUBSTITUTION

Partnering strategy

- **2021:** partnered with IPSEN in a global licensing deal

- **2023:** based on Phase IIb data

- **2022 -2023:** preclinical PoC or FIM studies

- **2022 -2024:** preclinical PoC or FIM studies

Strong development newsflow 2022-2024

Comment on
Q1 2022

Mesdopetam

H2 -22	Mesdopetam Phase IIb LIDs top-line results
2023	Mesdopetam Phase III LIDs study start
2023	Mesdopetam Phase II PD-P
2024	Mesdopetam market preparations starts

IPSEN led activity & decision

Pirepemat

2022	Pirepemat IIb study start
Q4-23	Pirepemat Phase IIb top-line results
2024	Pirepemat Phase III study start

IRL757

2022	IRL757 through preclinical dev
2023	IRL757 Phase I study start
2023	IRL757 Phase I top-line results
2024	IRL757 Phase IIa study start

IRL942

2022	IRL942 through preclinical dev
2023	IRL942 Phase I study start
2023	IRL942 Phase I top-line result
2024	IRL942 Phase IIa study start

P003

2022	P003 first CD nominated
2023	P003 CD Phase I study start
2024	P003 CD Phase I top-line results

Preclinical development: IRL942, IRL757 and the P003 project

- IRL942 To improve cognitive function & brain health
- IRL757 To treat apathy in neurology
(Target populations: Parkinson's, dementias, schizophrenia, depression)
- P003 Long-acting Parkinson's treatment
Efficacy equivalent to levodopa / apomorphine

IRL942: to improve cognitive function and brain health in neurological indications

IRL942 opportunity

- **12 %** of adults aged 65 years or more experience **cognitive decline** (CDC)

Problem

- **Disruption of frontal neurocircuits** are implicated in the pathogenesis of cognitive decline

IRLAB's solution

- IRL942 show a **unique ability** to activate frontal circuits and **broadly improve cognitive function**
- **Potential for both symptomatic relief and disease modification**



IRL757: to treat apathy in neurological indications

IRL757 opportunity

- Over 10 million US and EU citizens each may be affected by apathy
- Apathy occurs in 20-70% in people with Parkinson's and in 20-90% of people with Alzheimer's and other CNS disorders

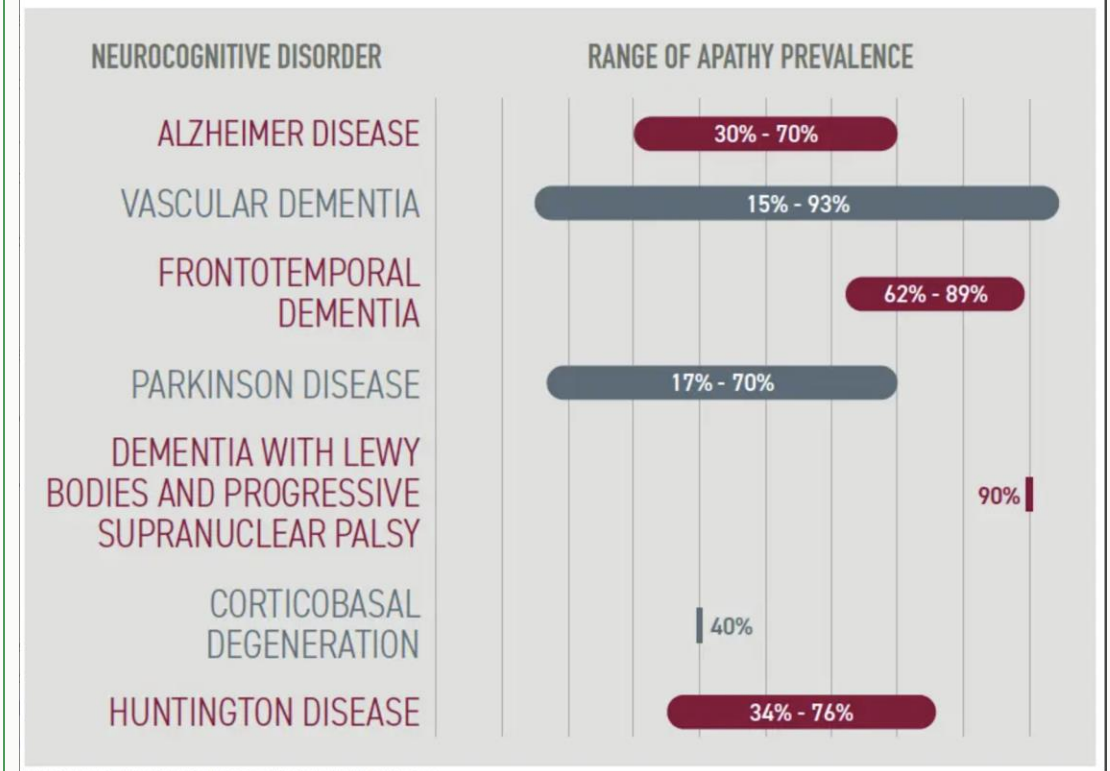
Pathophysiological background

- Disruption of frontal-subcortical circuits are implicated in apathy*

IRLAB's solution

- IRL757 presents a unique ability to increase neuronal activity in frontal circuits
- Potential for both symptomatic relief and disease modification

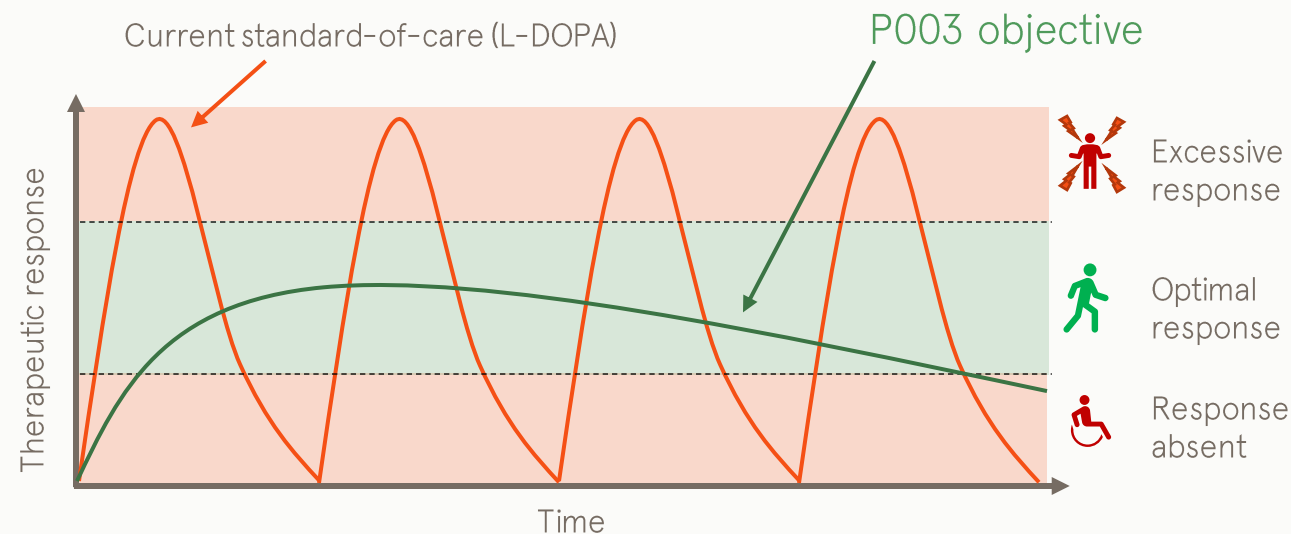
Figure. Apathy Among Individuals With Neurocognitive Disorders^{1,6,9-11}



P003: next generation Parkinson's treatments

Objective: long-acting, orally available, treatment of core motor symptoms of Parkinson's disease

- Total market (16 largest regions): 8.3 million people diagnosed with PD in 2022
- Potential to provide optimal functional efficacy without limitations of current treatments
- Mechanism: D1/D2 agonist with efficacy equivalent to levodopa / apomorphine



P003 status

- 1st generation: lead optimization ongoing
- 2nd generation: candidate identification through structural chemistry ongoing
- Strengthened immaterial rights position through acquisition of Know-How

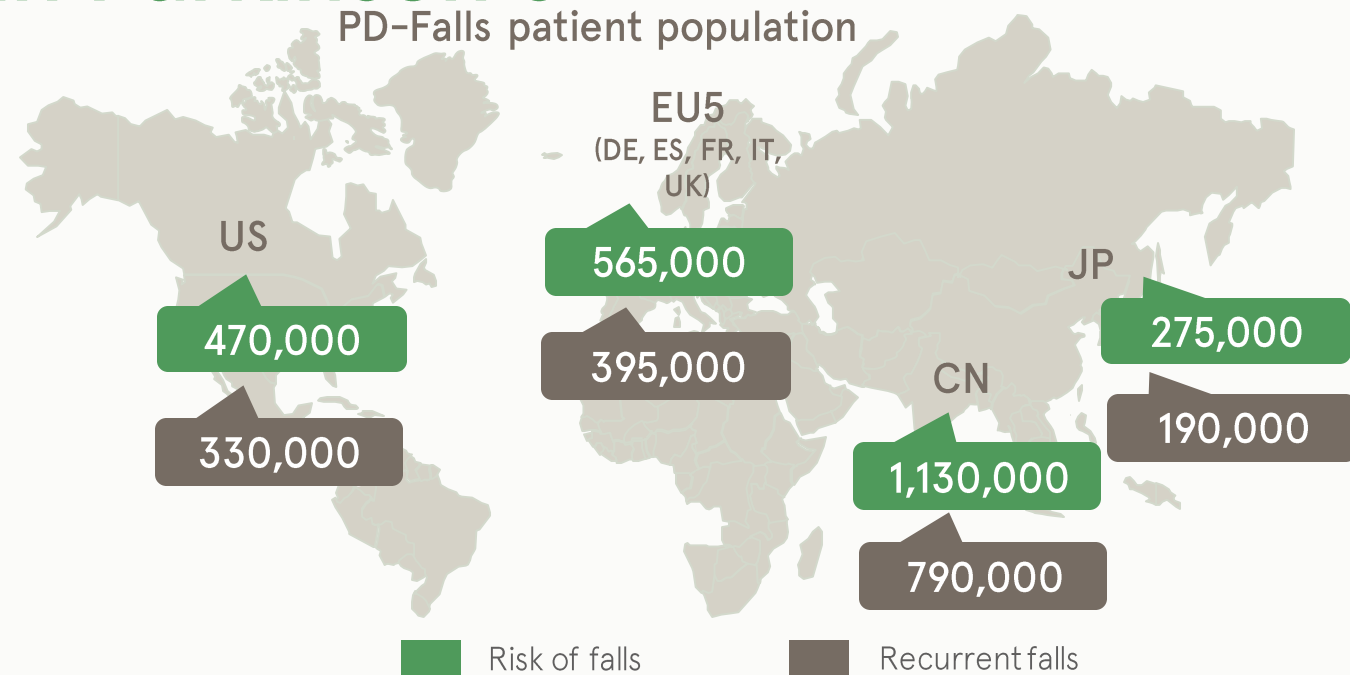
Pirepemat (IRL752)

To improve balance and reduce falls in Parkinson's (PD-Falls)

Pirepemat is designed to improve balance and reduce falls in Parkinson's

– A large unmet need

- 45% of all people with Parkinson's fall recurrently
- Impaired balance and a fear of falling significantly impair the daily lives of many with Parkinson's
- **Pirepemat is designed to improve balance and reduce falls** by strengthening nerve cell signalling in the cortex via action at 5HT7 and alpha-2 receptors
- The **cost of treatment for a fall** injury is estimated to about **30,000 USD** in elderly > age 65



IRLAB addresses a new, untapped market

Impaired balance leading to falls in Parkinson's have high prevalence and represent a great unmet medical need. There are currently no approved drugs.

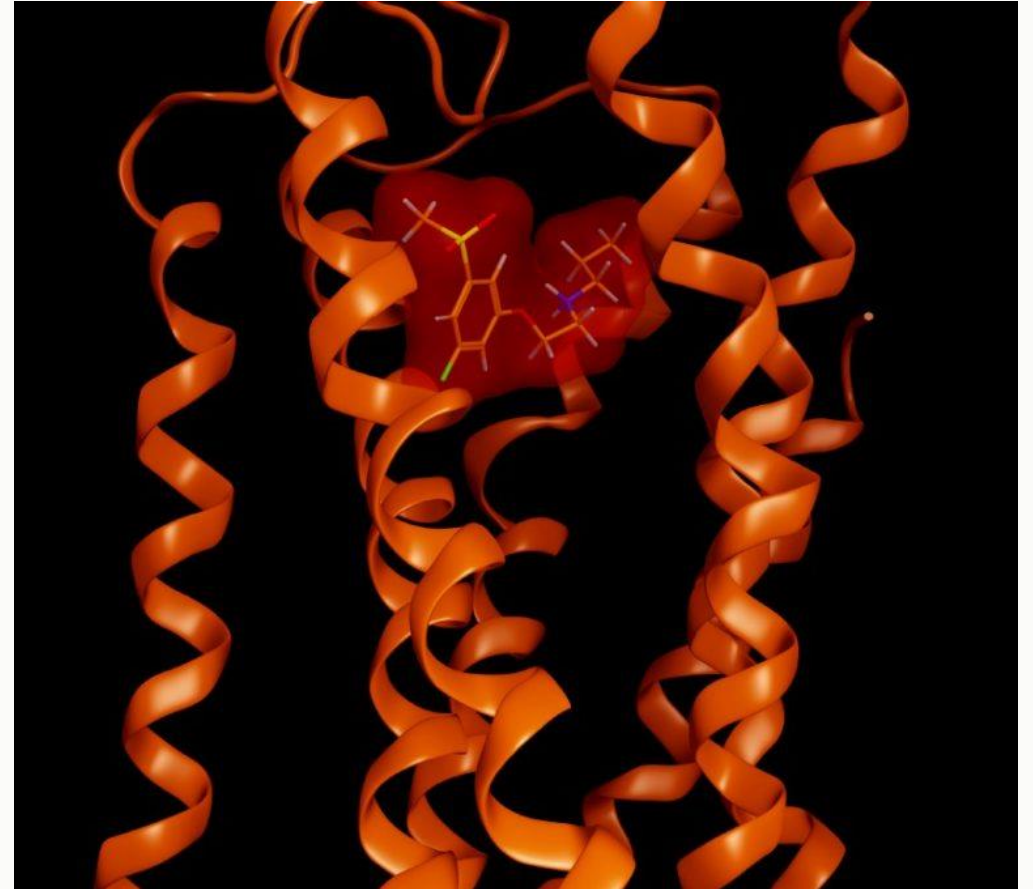
Pirepemat development during the first quarter 2022

Primary objective of the Phase IIb study

- Evaluate the effects of pirepemat on falls frequency as compared to placebo

Development during the first quarter 2022

- Regulatory approvals obtained in all countries participating Q4-21 and Q1-22: France, Germany, Poland, Spain and Sweden
- Study start during Q1
- Full focus on continued hospital and site activation across Europe



Mesdopetam (IRL790)

To improve motor function through prevention and reduction of dyskinesias (LIDs)

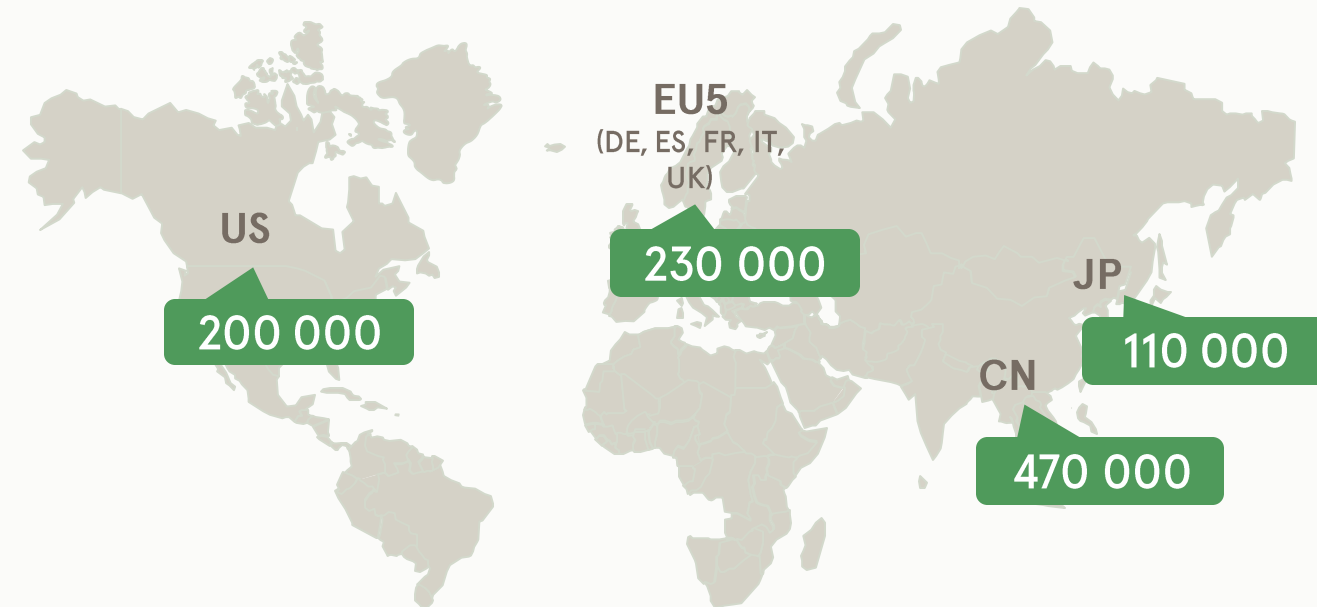
Treatment and prevention of psychosis in Parkinson's (PD-P)

Parkinson's disease levodopa-induced dyskinesia – an unmet need

Developments in Q1

- Study enrollment continues with a strong focus on completion of the study
- Noticeable impact of Covid 19 during the beginning of the quarter
- Preparations ongoing for Phase III studies (performed by Ipsen)
- IRLAB continues to support Ipsen efforts to bring mesdopetam to patients, with:
 - CMC
 - Clinical development
 - Preclinical development

PD-LIDs patients globally



Wide clinical potential in unmet medical needs in neurology

PD-LIDs

Levodopa-induced dyskinesias

- Affects about 25% of patients with Parkinson's
- Few treatment options, great unmet medical need

1 million

patients in 8MM*

PD-P

Parkinson's disease psychosis

- Affects about 35% of patients with Parkinson's, often associated with cognitive impairment
- Few treatment options, great unmet medical need

1,5 million

patients in 8MM*

TD

Tardive dyskinesia

- Affects about 25% of psychiatric patients receiving treatment with antipsychotic drugs
- Few treatment options, great unmet medical need
- Strong evidence links DA D3 receptor to underlying disease

~ 3 million

patients globally

Path to deliver strong growth

Foundation for transformative treatments

2020 - 2023

Mesdopetam

Successful completion of Phase IIb/III study*

Pirepemat

Successful completion of Phase IIb study

Pipeline

Initiate Phase I studies with IRL942 and IRL757

Initiate preclinical development of CD from P003

Deepen AI in the ISP methodology

Business development

License agreement for mesdopetam

Continued work toward new revenue-generating collaborations

Building for the future

2023 - 2025

Mesdopetam

Phase III studies initiated with partner Ipsen

Pirepemat

Initiating Phase III studies

Pipeline

Development of new drug candidates toward clinical PoC in Phase Ib and Phase II – IRL942, IRL757, CD from P003

Continued ISP development

Business development

Pirepemat partnering

Continued work toward new revenue-generating collaborations

Delivering first-in-class treatments

2025 - 2027

Mesdopetam

Finalizing Phase III and apply for marketing authorization

Pirepemat

Finalizing Phase III and apply for marketing authorization

Pipeline

Development of new drug candidates: Phase II PoC and initiation of Phase III (IRL 942, IRL757 and CD from P003)

Q&A



Contact:

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IRLAB discovers and develops novel drugs for the treatment of Parkinson's disease and other disorders of the brain. The company's most advanced drug candidates, mesdopetam (IRL790) and pirepemat (IRL752), both of which are currently subject to Phase IIb studies, were designed to treat some of the most difficult symptoms associated with Parkinson's disease. In 2021, IRLAB entered into an exclusive global license agreement with Ipsen regarding the development and commercialization of mesdopetam. Through its proprietary research platform, ISP (Integrative Screening Process), IRLAB has discovered and developed all its projects and keeps discovering innovative drug candidates for the treatment of disorders of the central nervous system (CNS). In addition to IRLAB's strong clinical development portfolio, IRLAB runs several preclinical programs, with IRL942 and IRL747 in development for Phase I studies.

More information: www.irlab.se