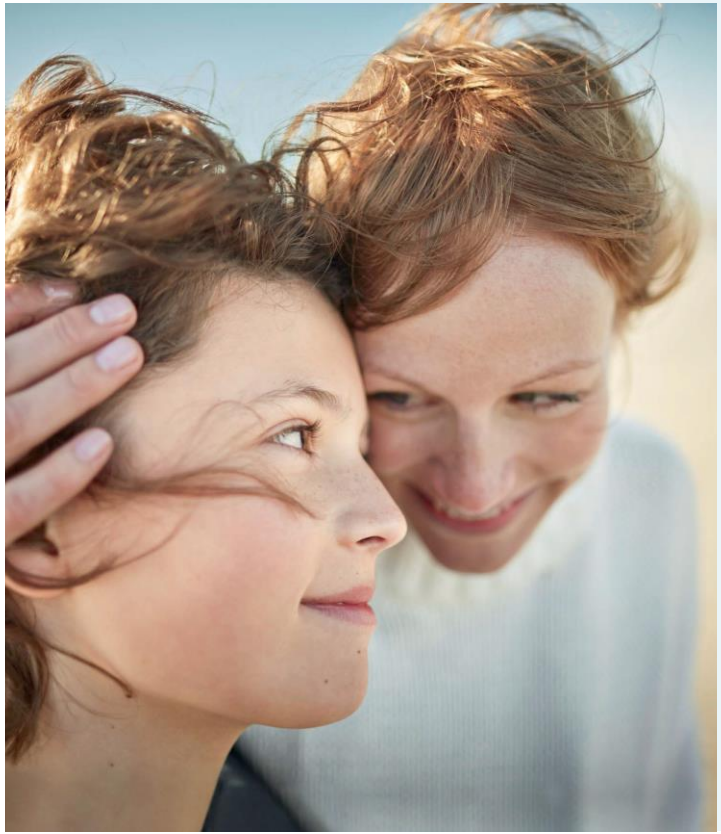


Investor Day

May 11, 2017

IPSEN
Innovation for patient care

01

Vision and Strategy

David Meek

Chief Executive Officer

01 Agenda

Time	Topic	Presenter
1:00 – 1:25pm	Vision and strategy	David Meek
1:25 – 1:45pm	Financials	Aymeric Le Chatelier
1:45 – 2:05pm	Q&A	David Meek/ Aymeric Le Chatelier
2:05 – 3:05pm	Key commercial products	Cynthia Schwalm/ Harout Semerjian
3:05 – 3:25pm	Q&A	Cynthia Schwalm/ Harout Semerjian
3:25 – 3:40pm	Break	
3:40 – 4:00pm	Consumer Healthcare	Benoit Hennion
4:00 – 4:25pm	R&D	Alexandre Lebeaut
4:25 – 4:55pm	Q&A	All
4:55 – 5:00pm	Conclusion	David Meek

IPSEN Innovation for patient care

VISION

To be a leading global biotech company focused on Innovation and Specialty Care

01 Ipsen well positioned in dynamic healthcare environment

Healthcare industry trends

- Aging population
- Pricing pressure increasing globally
- Intensified competition (branded and generics) including new players leveraging digital
- Uncertainties in Emerging Markets
- Importance of health outcomes research for reimbursement

Ipsen momentum accelerating

- Unmet medical needs remain high
- Speed of scientific innovation
- Increased purchasing power in Emerging Markets
- More targeted treatments
- Transformation in R&D and business development

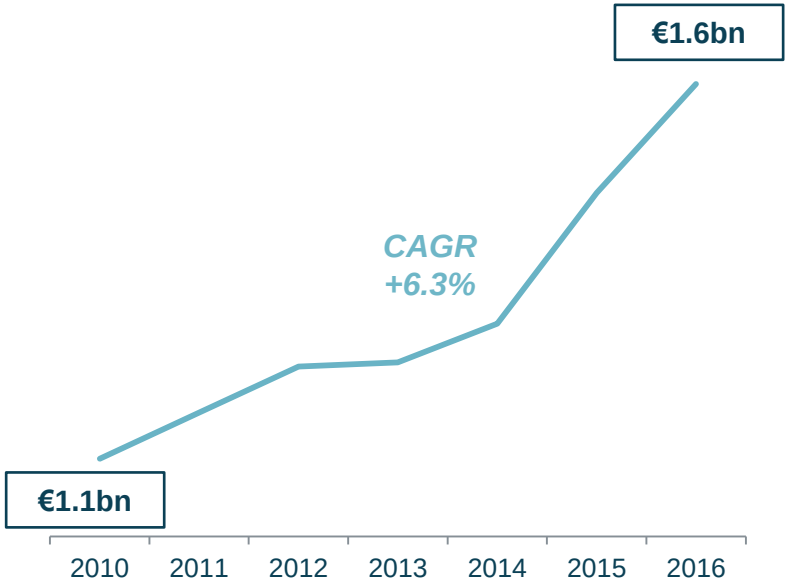
With **great people, great products** and **great science,**
Ipsen embraces the future with confidence

Board and management team alignment on growth and innovation

IPSEN
Innovation for patient care

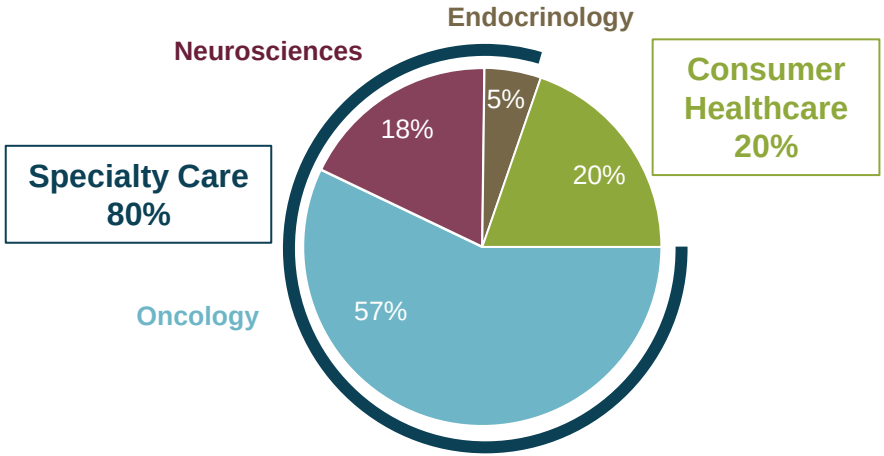
01 Ipsen momentum fueled by Specialty Care growth

Sales approaching €2.0 billion



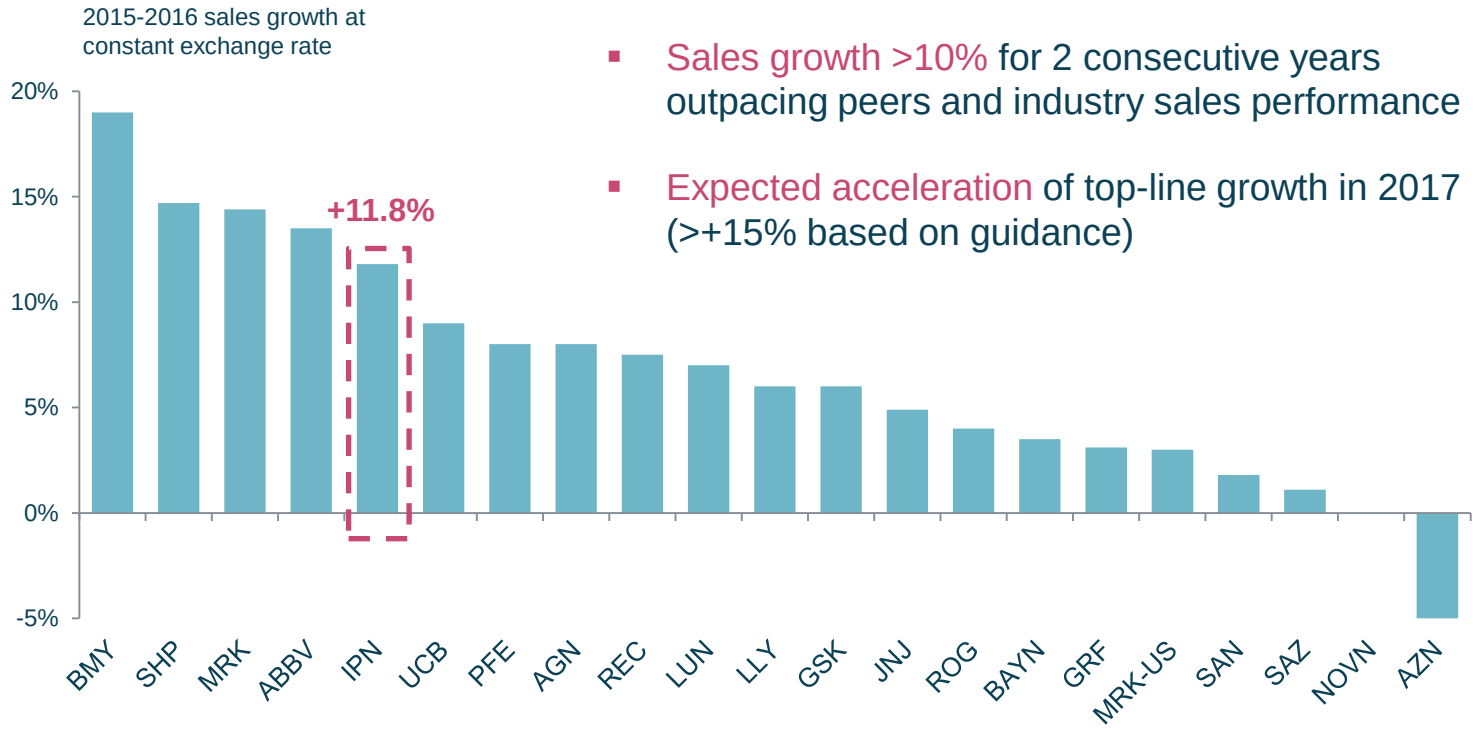
Specialty Care led business

2016 sales by therapeutic area



Market leader position or #2 for key products

01 Sales growth at high end of peer group… and increasing



- Sales growth >10% for 2 consecutive years outpacing peers and industry sales performance
- Expected acceleration of top-line growth in 2017 (>+15% based on guidance)

Source: Company figures reported at FY 2016 results (excluding additional acquisition)

01 Specialty Care growth driving top-line

Decapeptyl® SR triptorelin

- Volume growth in Europe
- Market growth and new indications in China

Dysport® BOTULINUM TOXIN TYPE A

- Double-digit toxin market growth
- Successful partnership with Galderma in Aesthetics

Somatuline autogel

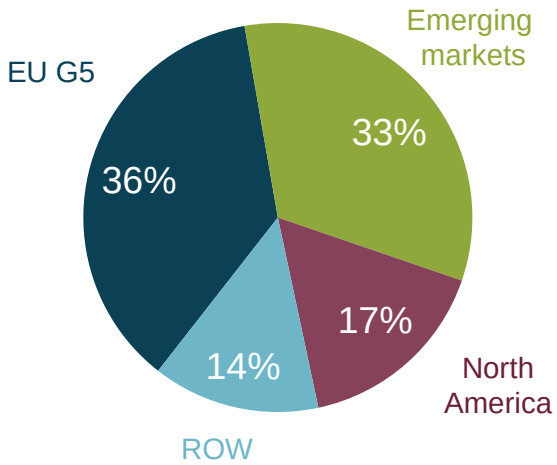
- Neuroendocrine tumor launch in the U.S.
- Continued market penetration in Europe

Specialty Care CAGR 2010-2016: **>+10%**

CAGR: Compound Annual Growth Rate

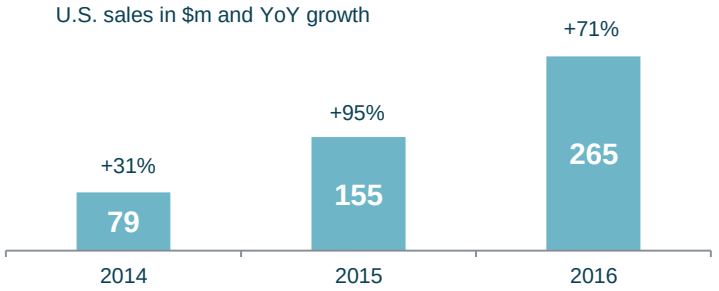
01 Geographic diversification; rapid expansion of U.S. footprint

U.S. fastest growing and #1 affiliate



Expanding U.S. market opportunity

- Somatuline® growing market share in NET indication
- Dysport® spasticity market expansion of indications
- Onivyde® launch in metastatic pancreatic cancer by experienced and proven Oncology commercial team in 2017



EU G5 Europe: France, Germany, Italy, United Kingdom, Spain; NET: Neuroendocrine Tumors; ROW: Rest of World

IPSEN Innovation for patient care

01 Key milestones propelling Ipsen forward over last 18 months

February 2016 — Cabometyx® in-licensing

July 2016 — New CEO

September 2016 — Cabometyx® EU approval and launch

January 2017 — Merrimack transaction

February 2017 — Sanofi CHC transaction

- Significant investments in business development of ~$1bn
- Growing Oncology focus

CHC: Consumer Healthcare

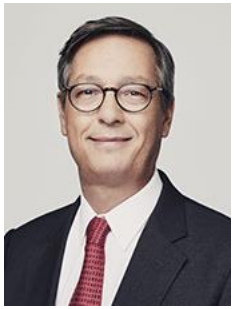
01 Management team

Aymeric Le Chatelier
Chief Financial Officer

Harout Semerjian
Specialty Care

David Meek
Chief Executive Officer

Cynthia Schwalm
North America
Commercial Operations



Alexandre Lebeaut
Chief Scientific Officer

Benoît Hennion
Consumer Healthcare

Jonathan Barnsley
Technical Operations

François Garnier
General Counsel

Christophe Jean
Strategy & Business Development

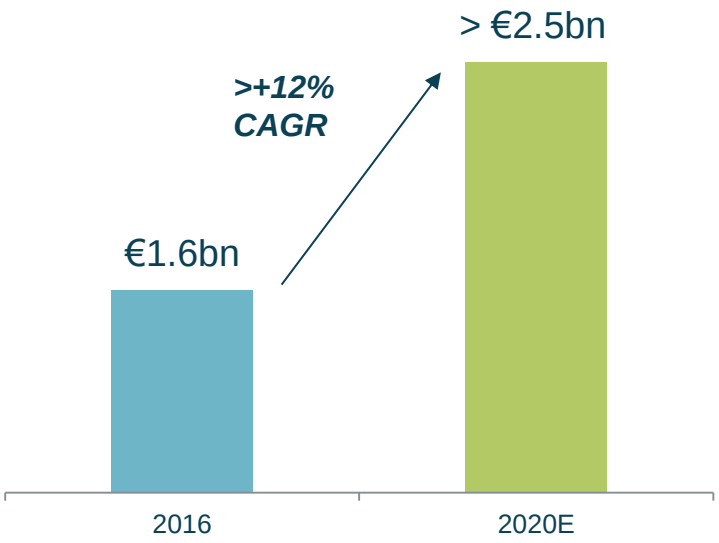
Stéphane Bessette
Human Resources

Proven management team with 200 cumulative years of experience within the pharma industry, of which more than 100 years in oncology and significant launch and entrepreneurial experience

IPSEN
Innovation for patient care

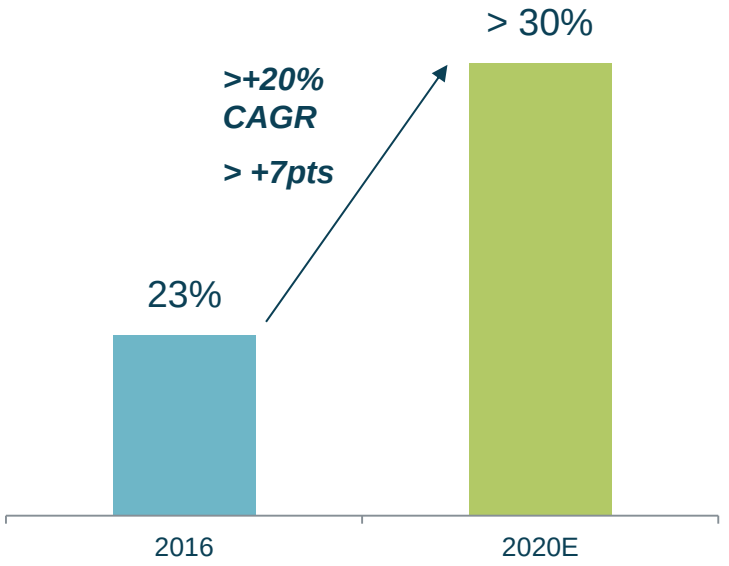
01 Improved 2020 financial guidance(1)

Group sales



Core Operating Income margin

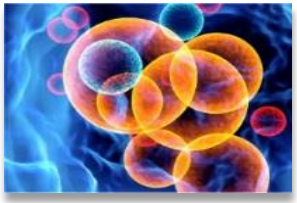
In percentage of net sales



(1) Guidance assumes no impact from business development and covers the impact of potential Somatuline® competitive threats

01 Focus on key therapeutic areas

Oncology



Neurosciences

Rare diseases

- Establish leadership position in specialty therapeutic areas
- Leverage expertise from development to commercialization
- Provide solutions along entire treatment paradigm

01 Establishing global leadership in specialty Oncology markets

Prostate Cancer	Neuroendocrine Tumors (NET)	Renal Cell Carcinoma (RCC)	Pancreatic Cancer
Established and growing product in EU and ROW (China)	Best-in-class somatostatin analog with market leadership position	Ongoing EU launch in 2L RCC supported by best-in-class clinical profile	Differentiated product with OS benefit for high unmet medical need
Decapeptyl® SR triptorelin	Somatuline autogel	CABOMETYX™ (cabozantinib) tablets	onivyde™ (irinotecan liposome injection)

LCM: Life Cycle Management; OS: Overall Survival; ROW: Rest of World

01 Building capabilities in Rare Diseases

Current portfolio

- Established Rare Diseases assets in Endocrinology (Nutropin®, Increlex®, Somatuline® in acromegaly); Oncology (Somatuline® in Neuroendocrine Tumors, carcinoid syndrome) and Neurosciences (Dysport® in pediatric spasticity)
- Pipeline includes further Rare Diseases assets (eg. telotristat ethyl)

Capabilities/ Factors for success

- Business model highly patient-centric (patient finding, advocacy groups, reimbursement assistance)
- Specialized, non-traditional skill-set in clinical/regulatory
- Scope to expand Ipsen Rare Diseases portfolio via targeted Business Development
- Agile and attractive global partner now with significant U.S. presence

LCM: Life Cycle Management; OS: Overall Survival; ROW: Rest of World

01 R&D pipeline highlights: Oncology and Neurosciences

Expanded late-stage development programs (from recent acquisitions)

- 1L renal cell carcinoma (RCC)
- 2L hepatocellular carcinoma (HCC)
- Combination therapy with immuno-oncology

- 1L metastatic pancreatic cancer
- Small-cell lung cancer (SCLC)

Lifecycle Management/ Expansion of portfolio

Neuroendocrine Tumors

- Somatuline® prolonged-release formulation (PRF)
- Telotristat ethyl
- Peptide Receptor Radionuclide Therapy (PRRT) theranostic program

Neurotoxins

- Dysport® additional indications (ALL - U.S., PUL)
- Next-generation toxins

ALL: Adult Lower Limb; PUL: Pediatric Lower Limb

01 R-D-C Innovation model to accelerate growth in Specialty Care

Research investment with selective focus

- Methodically and regularly review R&D pipeline to assess potential of ongoing projects
- Strategically expand pipeline via external innovation model

Development powerhouse

- Launch a new drug or indication/registration every year
- Improve product governance to accelerate programs

Commercial powerhouse in Specialty Care

- Focus on Oncology to increase market share for Somatuline®, competitive execution on Cabometyx® and Onivyde® launches
- Develop competitive capability to execute on regular and sustained high-quality launches

01 Transformation of R&D model

Objective: Ensure sustainable growth through replenished R&D pipeline delivering steady state of innovation and value

Nearer term

- Accelerate focused internal projects
- Prioritize portfolio
- Externally source early to mid-stage assets

Longer term

- M&A to bring in de-risked late-stage assets

Launch at least one new drug/ valuable indication every year

01 Consumer Healthcare

Establish a sustainable and growing Consumer Healthcare business

Transformation to OTx model

Capture Emerging Market opportunities (China, Russia)	Strengthen position in key European markets (France, Italy)	Leverage brand extensions

Reinforce and strengthen core portfolio

Challenging environment and market dynamics

OTx: combination of prescription and over-the-counter

01 Innovation and business development strategy

Transaction criteria

- Strategically aligned
- Financially viable
- Ability to integrate / synergies

Longer-term targets

- Earlier/ innovative best-in-class assets
- De-risked late-stage assets

01 ONE Ipsen company culture

4 principles to become:

A leading global biotech company, focused on Innovation and Specialty Care

TEAM SPIRIT

AGILITY

RESULT ORIENTATION

ACCOUNTABILITY

01 Ipsen roadmap

- Deliver double-digit growth and improving profitability
- Implement R&D transformation with focus on innovative and differentiated assets
- Bolster external sourcing model/ business development to expand innovative Specialty Care pipeline
- Accelerate Consumer Healthcare business to sustainable and profitable growth
- Deliver superior value to patients and shareholders

02
Financials

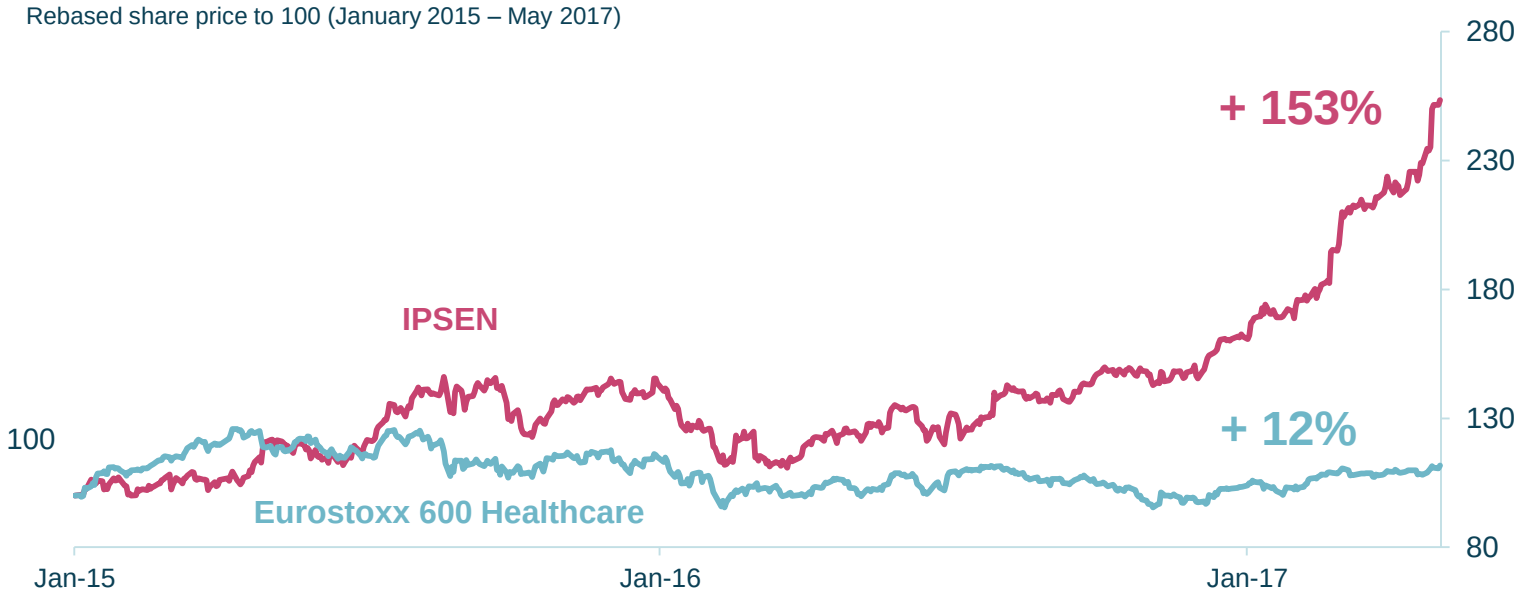
Aymeric Le Chatelier

Chief Financial Officer

AMBITION

To drive the financial performance
and support the successful transformation of Ipsen

02 Significant shareholder return since 2015

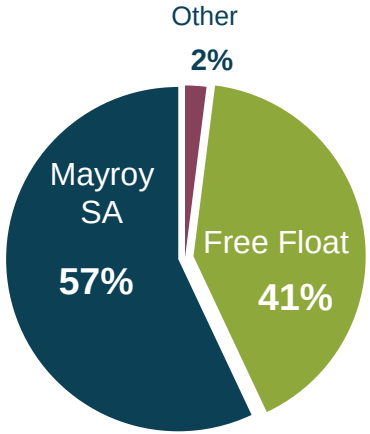


Share price increase on average by +49% per year since early 2015 to current (May 2, 2017)
Stable dividend of €0.85 with average distribution rate of 34%

02 Ipsen shareholding structure

Mayroy SA, holding structure of the Beaufour family

- 57% capital
- 72% voting rights
- Board fully supportive and aligned with Ipsen management



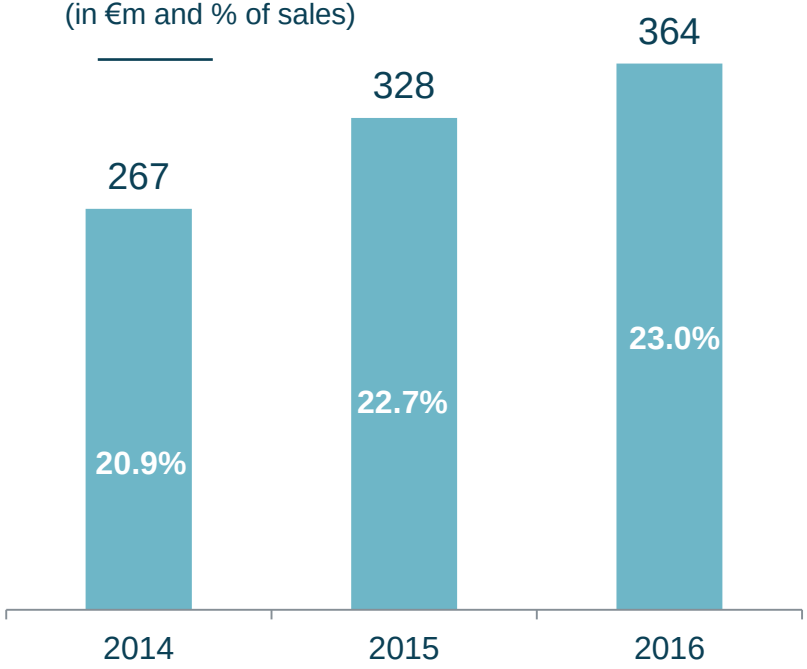
Free Float

Top countries

- French investors largest shareholder base
- Growing U.S. investor base
- Balance of growth and value investors

02 Growing Core Operating Income and improving margin 2014-16

Core Operating Income
(in €m and % of sales)



Strong business performance (+2 pts in 2 years)

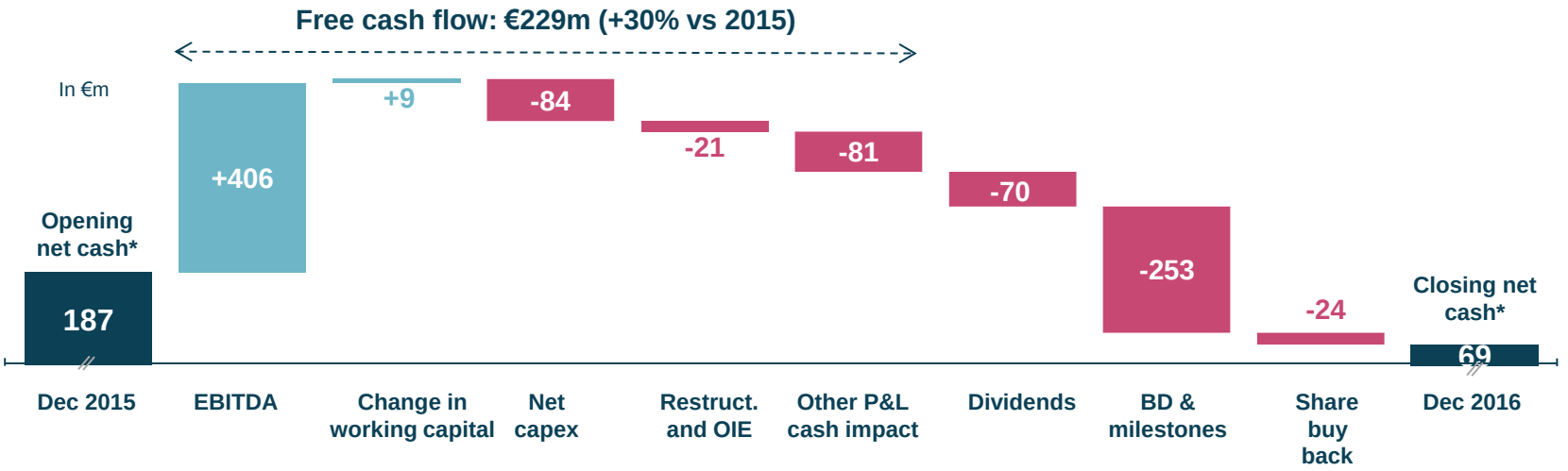
- Solid performance of Somatuline® in the U.S. and Europe driving COI margin enhancement
- Significant contribution from Galderma partnership for Dysport®

While investing to support business growth

- Somatuline® and Dysport® in the U.S.
- Cabometyx® launch in Europe
- New OTx commercial model for Consumer Healthcare in China, Russia and France

COI: Core Operating Income; OTx: combination of prescription and over-the-counter

02 Generating solid cash flow in 2016



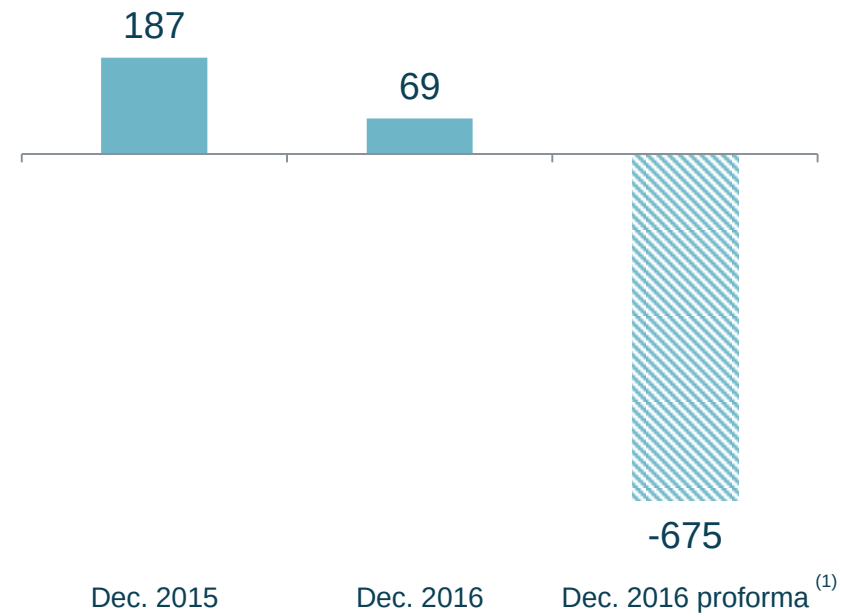
- Free cash flow growth of +30% in 2016
- Profitability enhancement from the Specialty Care business reflected in cash flow generation
- Significant return to shareholders through dividend and share buyback

* Cash and cash equivalents net of bank loans/ overdrafts and other financial liabilities
BD: Business Development; EBITDA: Earnings Before Interest, Tax, Depreciation and Amortization; OIE: Other Income (Expense)

IPSEN Innovation for patient care

02 Solid financial profile funding recent M&A transactions

Net cash / (debt) position
in millions of euros



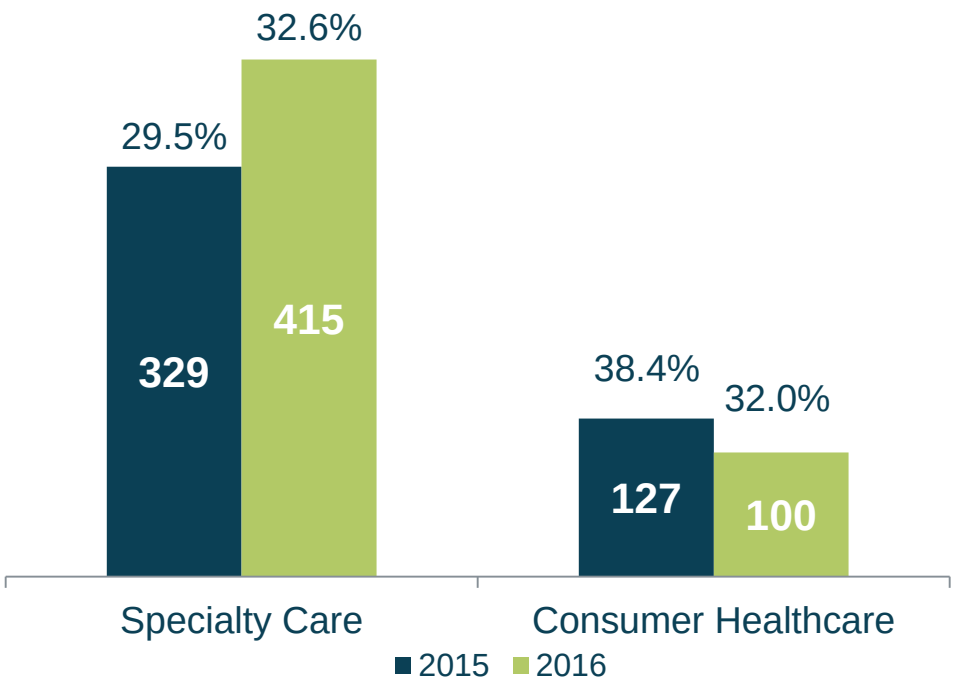
- Exelixis transaction for Cabometyx® for ~€300m (including upfront & milestones) fully financed in 2016 by existing cash and cash generated during the year
- Transactions announced in 2017 (Onivyde®, Italy and Sanofi CHC assets) for ~€630m financed in 2017 by available cash (from €300m 7-year public bond raised in June 2016) and bilateral long term bank lines
- Expected leverage end of 2017(2) after financing of these transactions at ~1.0x EBITDA to net debt

(1) Proforma debt position reflecting the estimated impact of the transactions with Merrimack, Sanofi and Akkadeas Pharma as if those transactions had closed as of December 31, 2016;
(2) Excluding any additional business development
CHC: Consumer Healthcare; EBITDA: Earnings Before Interest, Tax, Depreciation and Amortization

IPSEN Innovation for patient care

02 Specialty Care and Consumer Healthcare margins converged in 2016

Core Operating Margin
in €m and as % of net sales(1)



Specialty Care

- Margin enhancement driven by Somatuline® growth in the U.S. and Europe
- Margin impacted by investments in 2016 for Cabometyx® launch in Europe
- New products Cabometyx® and Onivyde® to leverage future margin

Consumer Healthcare

- Margin deterioration due to lower sales and investment support OTx commercial model
- Consumer model to drive sales growth but lower level of margin, in line with CHC peers

(1) Core Operating Income for the 2 operating segments without allocating corporate overhead costs and the impact of the currency hedging policy
CHC: Consumer Healthcare; OTx: combination of prescription and over-the-counter

02 Confident in ability to achieve 2017 objectives

Strong Q1 2017 Results

Specialty Care sales: +25.4%(1)

Consumer Healthcare sales: -5.3%(1)

FY 2017 Guidance *

Specialty Care sales > +18%(1)

Consumer Healthcare sales > +4%(1)

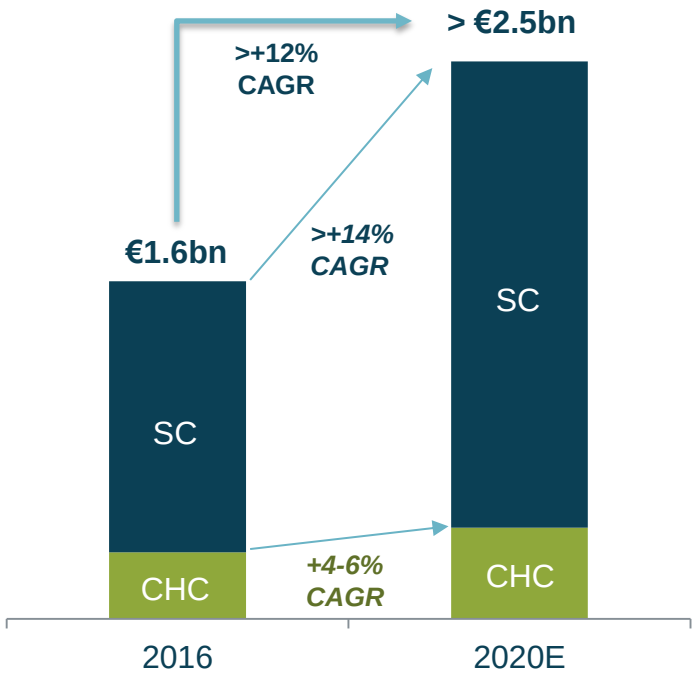
Core Operating Margin > 24%

* after completion of acquisitions of Onivyde® and Sanofi CHC Assets

(1) Year-on-year growth excluding foreign exchange impacts

02 Specialty Care driving 2020 top-line growth

Group sales



Key drivers for sales growth

Specialty Care to grow >14% per year

- Contribution from existing products (Somatuline®, Dysport® and Decapeptyl®) and recent acquisitions (Cabometyx® and Onivyde®)
- Limited sales from expected pipeline (telotristat ethyl, Dysport® solution)

Consumer Healthcare to grow by 4-6% per year

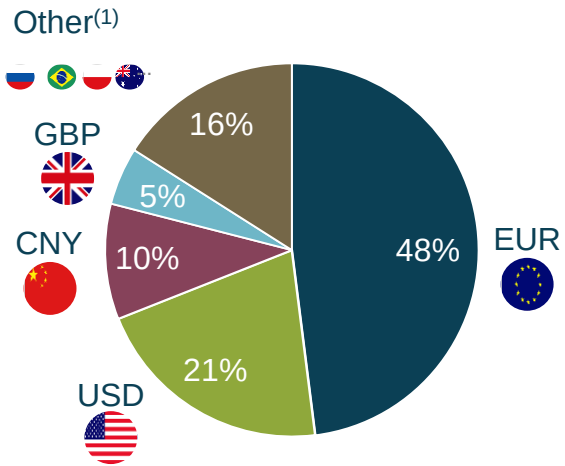
- Contribution from Prontalgine® & Buscopan® (Sanofi transaction) and Akkadeas Pharma (Italy)
- Growth from OTx commercial strategy (mainly Smecta®) including launch of new products

Assuming no impact from business development and covering the impact of potential Somatuline® competitive threats

SC: Specialty Care; CHC: Consumer Healthcare; OTX: Combination of prescription and over-the-counter

02 Increasing exposure to USD and foreign currencies

FY 2016 sales by currency



More than 50% of sales in non-EUR currencies

- Exposure to USD to increase with Onivyde® acquisition
- Emerging Market exposure to remain significant

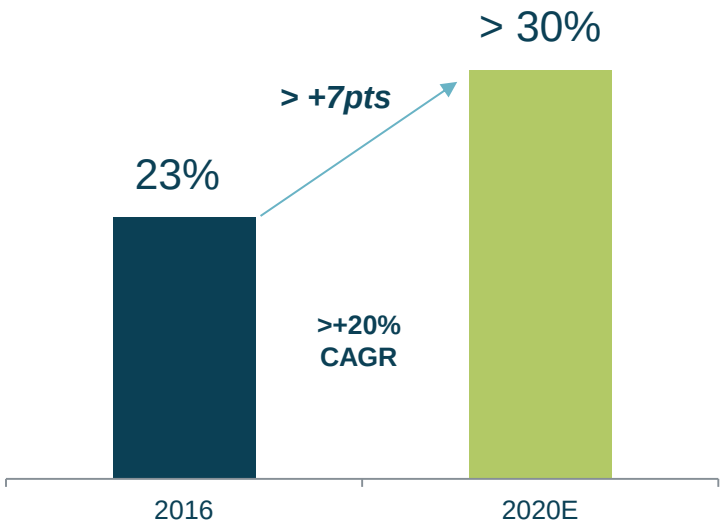
Foreign currency policy

- Global FX exposure mitigated by cost base in local currency (eg. GBP positive impact in 2017) and hedging of key currencies
- External debt converted in USD after Onivyde® acquisition given the high USD cashflow generation

(1) Includes RUB, BRL, AUD, PLN and other currencies

02 Operating leverage to achieve 2020 margin guidance

Core Operating Income margin



Key drivers for margin evolution

Gross Margin: Broadly stable
Benefits from Somatuline® & Onivyde® growth and manufacturing efficiencies offset Cabometyx® higher royalties

Sales & Marketing: Significant reduction as % of sales
Commercial synergies and streamlining of commercial organization from Cabometyx® and Onivyde®

R&D: Increase as % of sales
Support of existing programs (including Cabometyx® and Onivyde®) and new R&D assets as pipeline refilled

G&A: Decrease as % of sales
Limited growth in support functions and streamlining of operations

02 Strict capital allocation principles

Capex

- Need investment to support capacity expansion for Dysport® and Somatuline® growth (>€100m per year)

Dividends

- Policy to increase dividend in line with mid-term growth while supporting external growth strategy

Share buyback

- Policy to cover management incentive plans against any future dilution (~€25m per year)

Other assets

- Expected cash-in from Ipsen out-licensed assets (Rhythm, Radius, OBI-1,…)

Business development

- Significant financing capacity to support acquisition of early-stage and late-stage assets
  - >€1bn by 2020 while remaining at a leverage of ~1.0x EBITDA
  - Opportunities to further leverage balance sheet
- Strict financial discipline based on IRR, value creation and probability of success

Level of synergies and accretion to group earnings

EBITDA: Earnings Before Interest, Taxes, Depreciation & Amortization; IRR: Internal Rate of Return

02 A virtuous cycle for long-term growth and profitability

- Strong **sales growth** and financial discipline…
- to increase **profitability** and cash generation…
- allowing for **external acquisitions** …
- to fuel **long-term growth** and optimize operating performance.

02 Finance roadmap

- Deliver 2020 financial guidance (sales >€2.5bn and COI margin >30%) through sales growth and operating leverage including cost discipline and effective R&D investment

- Maintain solid balance sheet, strong cash generation and financial discipline to support business development (including R&D assets)

- Increase total shareholder return through increased dividend payment and capital appreciation of share price

COI: Core Operating Income

Q&A

IPSEN
Innovation for patient care

03

Key commercial products

Cynthia Schwalm, President, North America Commercial Operations

Harout Semerjian, President, Specialty Care International Region & Global Franchises

Somatuline®

Cynthia Schwalm

President, North America Commercial Operations

AMBITION

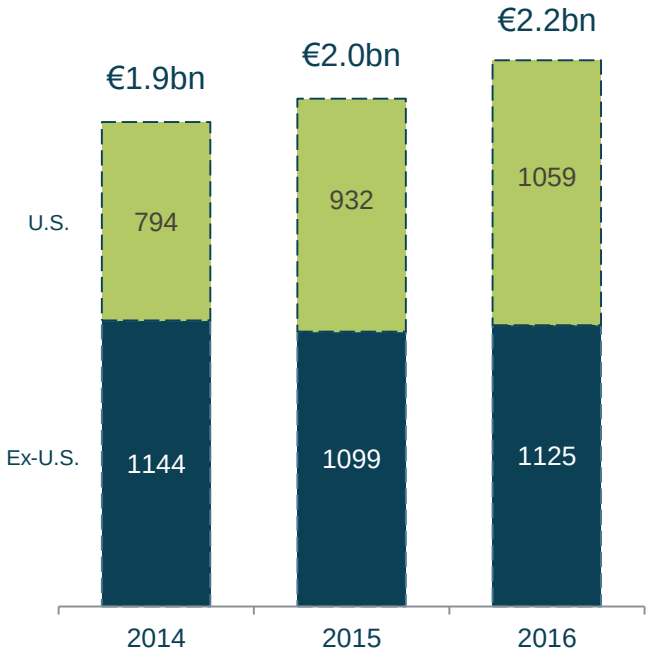
To be the Neuroendocrine Tumor market leader

03 Background of Neuroendocrine Tumors (NET)

Neuroendocrine Tumors

- Rare, heterogeneous, slow-growing tumors
- Arise from cells with neuroendocrine origin
  - Gastroentero-pancreatic (~60-70%)(1;2)
  - Lung/ thymus (~25%)
- Prevalence: ~180K in the U.S., ~200K in EU
- Incidence: ~5.25/100K(1) in the U.S., ~3.0/100K in EU(3)
- Functional (symptomatic ~30%) or non-functional (asymptomatic ~70%)
- Long-acting somatostatin analogs (SSAs) - Somatuline® (Ipsen) and Sandostatin® LAR (Novartis) – standard of care for 1L therapy

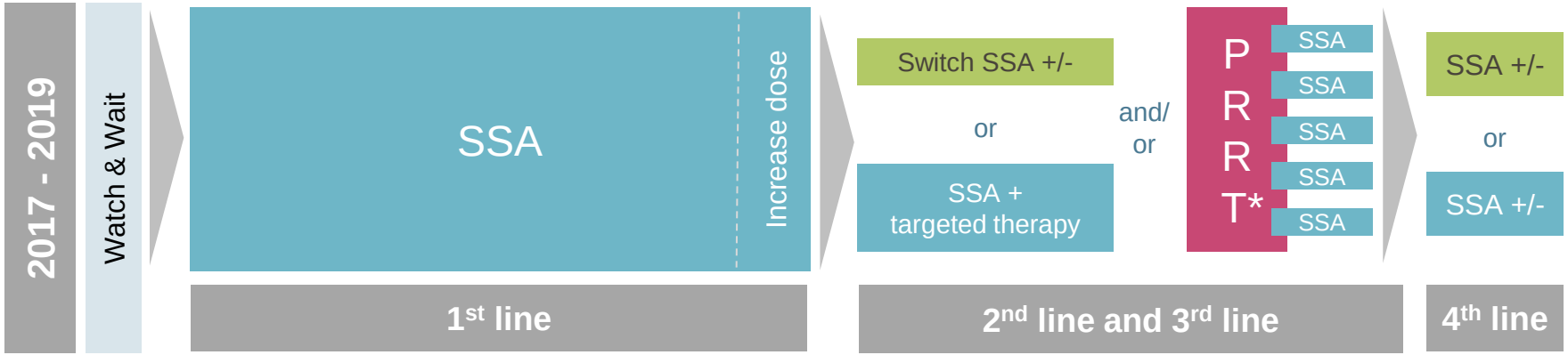
SSA Market value



SSA: Somatostatin Anaolgs
Figure adapted from Lawrence B, et al. Endocrinol Metab Clin North Am 2011
(1) Frilling A, at al. Endrocr Relat Cancer. 2012; (2) Yao J, et al. J Clin Oncol. 2008); (3) ESMO Guidelines

IPSEN Innovation for patient care

03 Somatostatin analogs (SSA) as backbone of therapy across patient journey

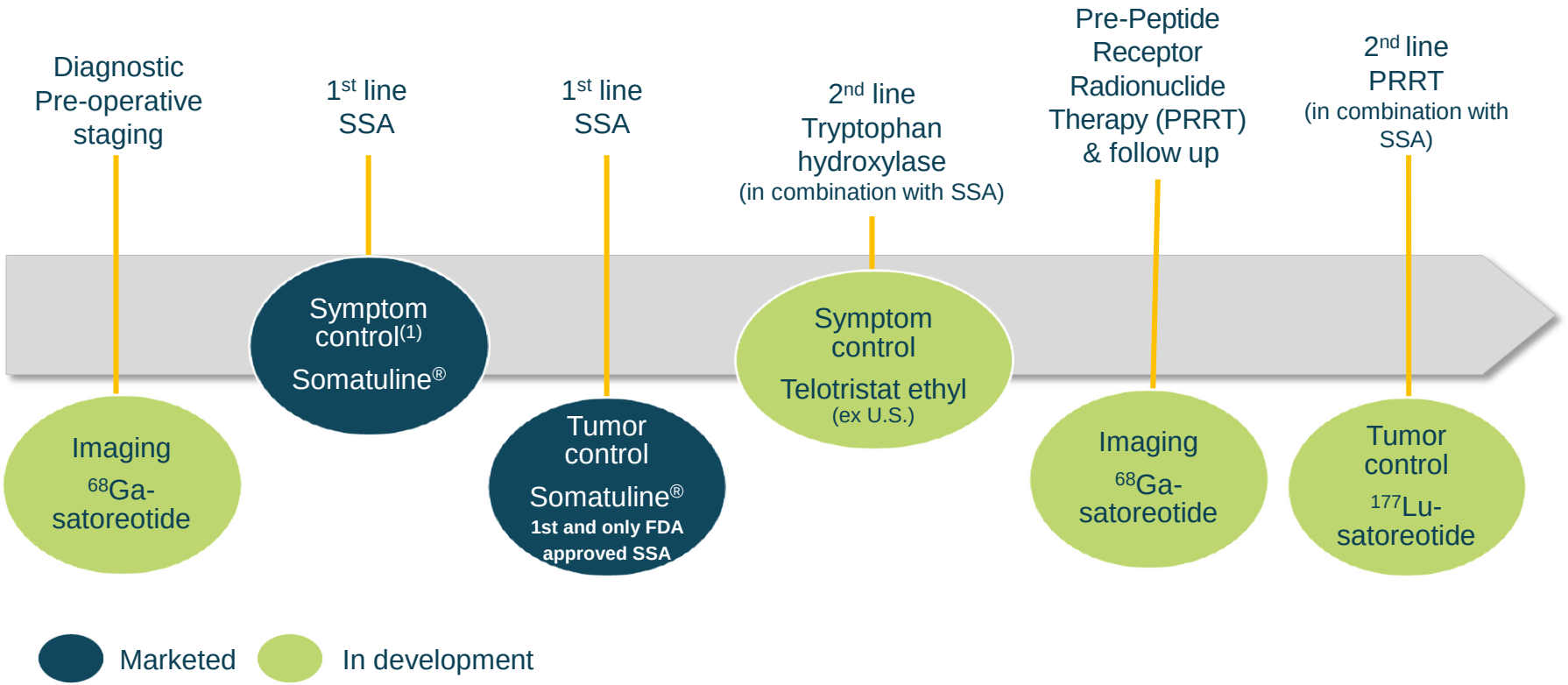


NCCN states that treatment can be initiated with SSAs and may be continued in combination with any of the subsequent recommended options in appropriate patients.

Sources: 1. Dec 2015 Ipsen GEP-NET Competitive Impact Study, KOL Expert Interviews; 2. National Comprehensive Cancer Network. Neuroendocrine Tumors (Version 2.2017).
NCCN: National Comprehensive Cancer Network
*PRRT is an investigational therapy that has ²not been approved by the FDA

IPSEN Innovation for patient care

03 Establishing NET leadership across treatment paradigm



(1) Expected approval in the U.S. in H2 2017
NET: Neuroendocrine tumors ; SSA: Somatostatin analog; PRRT: Peptide Receptor Radionuclide Therapy

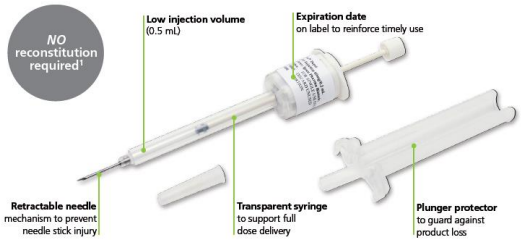
IPSEN Innovation for patient care

03 Somatuline®: Best-in-class in Neuroendocrine Tumor (NET) market

Strong differentiated clinical profile

Strong clinical profile

- Only global landmark registration trial for tumor control in GEP-NETs (1st and only FDA approval)
- Significantly extended progression-free survival (PFS)
- Carcinoid syndrome symptom control indication under FDA review



Enhanced administrations

Enhanced administration experience

- Prefilled, ready-to-use syringe that is administered as a deep subcutaneous injection.
- No reconstitution required
- Predictable and sustained PK/PD dynamics

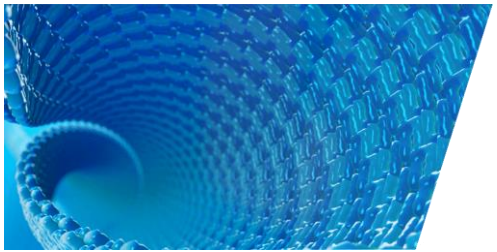
Unique depot formulation

Unique Formulation

- Unique formulation manufactured using advanced liquid crystal technology.
- Engineered to provide sustained release for once-monthly dosing

Complex biologic manufacturing

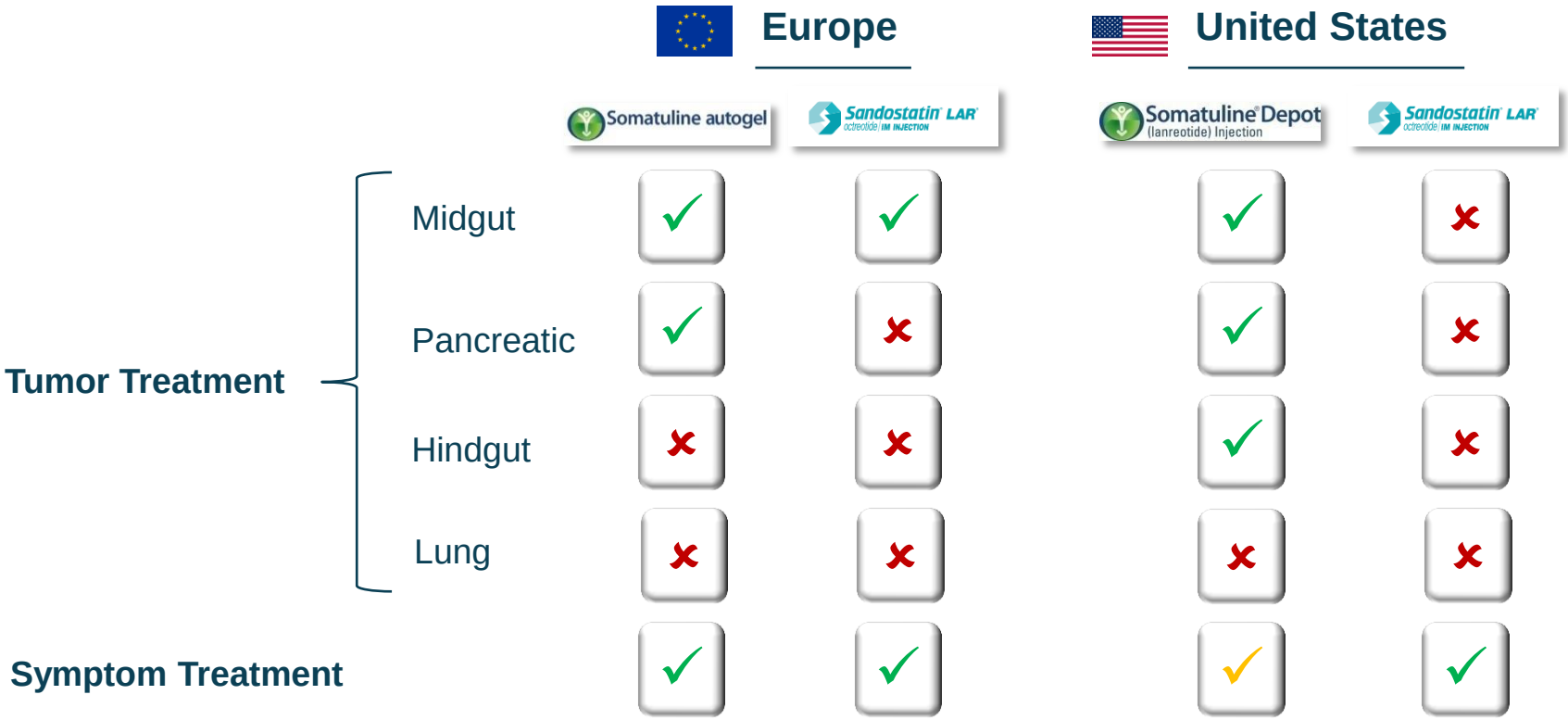
- Significant know-how required to scale up, increase yields and maintain quality



Caplin ME,, et al, N Engl J Med. 2014;371:224-233.(1) CPPs: Critical Process Parameters
Figure adapted from Lawrence B, et al. Endocrinol Metab Clin North Am 2011 (Frilling A, at al. Endrocr Relat Cancer. 2012; Yao J, et al. J Clin Oncol. 2008)
PK: Pharmacokinetics; PD: Pharmacodynamics

IPSEN Innovation for patient care

03 Somatuline®: Broader NET label than competition

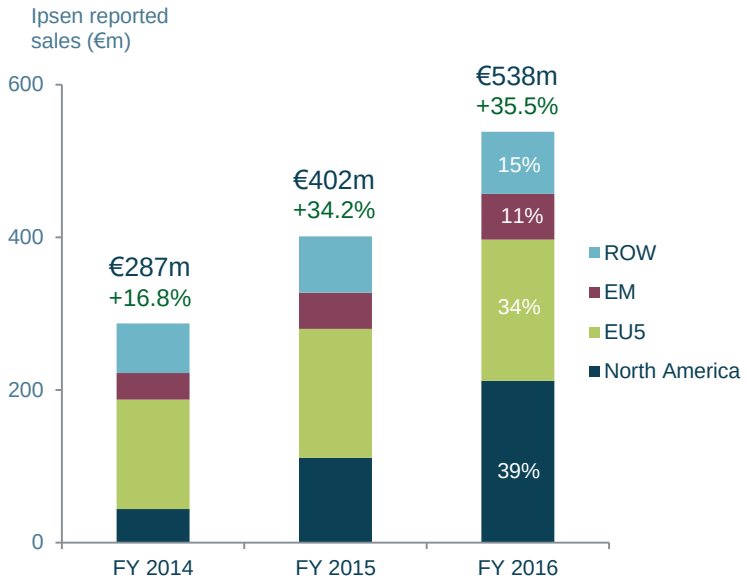


Expected approval in H2 2017

NET: Neuroendocrine tumors

03 Exceptional Somatuline® performance driving Specialty Care business

3-year sales growth



Attractive financial profile

- Wholly-owned global asset
- Largest, fastest growing and most profitable product
- U.S. driving 2/3 of Somatuline® growth
- Market share increasing in U.S. and Europe
- Volume growth is key driver

EU5: France, Germany, Italy, United Kingdom, Spain; ROW: Rest of World

03 Somatuline® momentum to continue; Market-leading performance in Europe combined with accelerated uptake in the U.S.

Substantial U.S. market opportunity

- Expansion of SSA market to over $1bn since Somatuline® NET launch in early 2015
- Over 5x increase in NET incidence over last 40 years(1)
- Volume driven growth from new patients and previously untreated “watch and wait” patients (~15% U.S. market)
- Presence in major treatment centers

Product differentiation

- Best-in-class clinical profile of enhanced, ready-to-use subcutaneous device
- FDA regulatory decision for symptom control in the U.S. – H2 2017
- Ongoing Phase 3 trial in lung NET (~25% total NET market)
- New device under development with enhanced features for HCPs and patients
- Ongoing Phase 2 for 3-month formulation

HCPs; Health Care Professionals; NET: Neuroendocrine Tumors; SSA: Somatostatin Analog
(1) Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence – SEER 18 Regs Research Data, Nov 2011

03 Lifecycle management

Prolonged Release Formulation (PRF)

- Unique and strong competitive opportunity for SSA patients to be switched to 3-month PRF
- SSA market history shows that longer-acting formulations are game-changers
- Four vs. twelve injections per year
- Phase 2 trial ongoing
- Regulatory filing expected in 2021

Patient-friendly 4-in-1 device

- New device provides enhanced features for physicians and patients to further improve Somatuline® administration experience
- Launch planned in 2018

SSA: Somatostatin Analog

03 SSA competitive threats

Loss of exclusivity

- Somatuline® Depot (U.S.) – March 2020 acromegaly, December 2021 orphan drug designation in NET
- Sandostatin® LAR (U.S.) – January 2017
- EU patents expired for Somatuline® Autogel® and Sandostatin® LAR with no long-acting formulation generic on the market

Constraints to entry

- Complex peptide manufacturing process requiring dedicated facility
- Specificities of NET market dynamics
  - Patients on therapy for 3-7 years on average (pancreatic vs GI NET)
  - Very limited switch patients
- Requirement to demonstrate bioequivalence to FDA

GI: Gastrointestinal; NET: Neuroendocrine Tumor; SSA: Somatostatin Analog

03 Somatuline® roadmap

- Expand leadership position in NET market
  - Commercial and Medical Affairs execution
  - Increase patient preference for Somatuline®
  - Establish Somatuline® as SSA of choice for backbone therapy
- Differentiate through clinical data, publications, commercial execution and patient outreach
- Continued innovation to drive increased adherence and patient comfort with expected new 3-month formulation and improved 4-in-1 device

NET: Neuroendocrine Tumor; SSA: Somatostatin Analog; LCM: Lifecycle Management

Cabometyx®

Harout Semerjian

President, Specialty Care International Region
& Global Franchises

IPSEN
Innovation for patient care

AMBITION

To establish Cabometyx® as standard of care in advanced RCC/ Expand indications and combinations

RCC: Renal Cell Carcinoma

IPSEN
Innovation for patient care

03 Cabometyx®: Unique mechanism to treat renal cell cancer

Renal cell cancer at a glance

- Kidney cancer is 7th common cancer in Europe(1) and RCC accounts for ~85% of all kidney cancers(2)
- Over one-third of patients diagnosed with metastatic disease (lungs, lymph nodes, bones)
- 5-year survival in distant metastatic RCC <20%
- Overall survival in metastatic disease is 22 months

Cabometyx® mechanism of action

- An oral, small molecule that targets MET and AXL beyond VEGF receptors(3), with the potential to overcome the resistance induced by prior antiangiogenic therapies
- Rationale for combination with IO: Preclinical evidence of cabozantinib's ability to create a more immune-permissive environment

(1) Ferlay et al. EJC, 2013; (2): Sachdeva et al. Medscape, updated December 2015-retrieved March 2016; (3) CABOMETYX® SmPC, 2016.
IO: Immuno Oncology; VEGF: Vascular endothelial growth factor

03 Cabometyx®: Unprecedented clinical profile

Efficacy

- 1st & Only treatment to deliver significant benefit in OS, PFS & ORR in Phase 3 study

Reduction of risk of death	**34%(1)**
Reduction of risk of progression or death	**49%(1)**
Median PFS(2)	**Almost 2x(1) versus everolimus**
Objective Response Rate	**6x higher versus everolimus (24% vs 4%)**

- Oral agent

Robustness & reliability

- Consistent results across patient subgroups regardless of risk group, duration of prior treatment, presence of bone or visceral metastases

Speed

- Median time to response: 1.9 months

Tolerability profile

- Known and manageable Class effect TKI AE profile
- Discontinuation rate(2): 10%

Cabometyx® recommended as preferred treatment option by ESMO, EAU and NCCN guidelines

AE: Adverse Event; OS: Overall Survival; ASCO: American Society of Clinical Oncology; EAU: European Association of Urology; ESMO: European Society for Medical Oncology; PFS: Progression Free Survival; ORR: Objective Response Rate TKI: Tyrosine Kinase Inhibitor
(1) Cabometyx® SmPC; (2) Cabometyx® USPI; NCCN Guidelines Version 1.2017

03 Accelerated launch preparation to capitalize on Cabometyx® opportunity

Solid foundation

- Demonstrated capability to conquer number 1 or 2 position in competitive oncology markets such as prostate cancer & neuro-endocrine tumors
- Footprint in Uro-Oncology in Europe & emerging markets

Cabometyx® focused structure

- Dedicated & fully experienced oncology teams assigned to Cabometyx® launch across major markets
  - 150 new positions across G9: sales, medical, market access and dedicated leadership
- Successful partnership with Exelixis to maximize global value

Accelerate growth trajectory and deliver full potential across indications

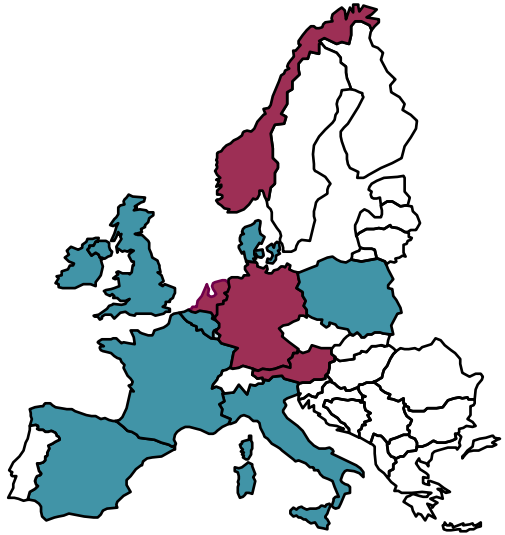
03 Increasing patient access to Cabometyx®

Europe patient access

- ~1,400 patients treated to date
- Growing share of new 2L RCC patients
- 17 Health Technology Assessment/ Pricing & Reimbursment dossiers submitted in Europe

Rest of World regulatory submissions

- Dossiers already submitted for Australia, South Korea, Hong Kong
- Canada submission expected in Q2 2017
- ~20 additional submissions planned in 2017



Cabometyx® commercially launched & reimbursed

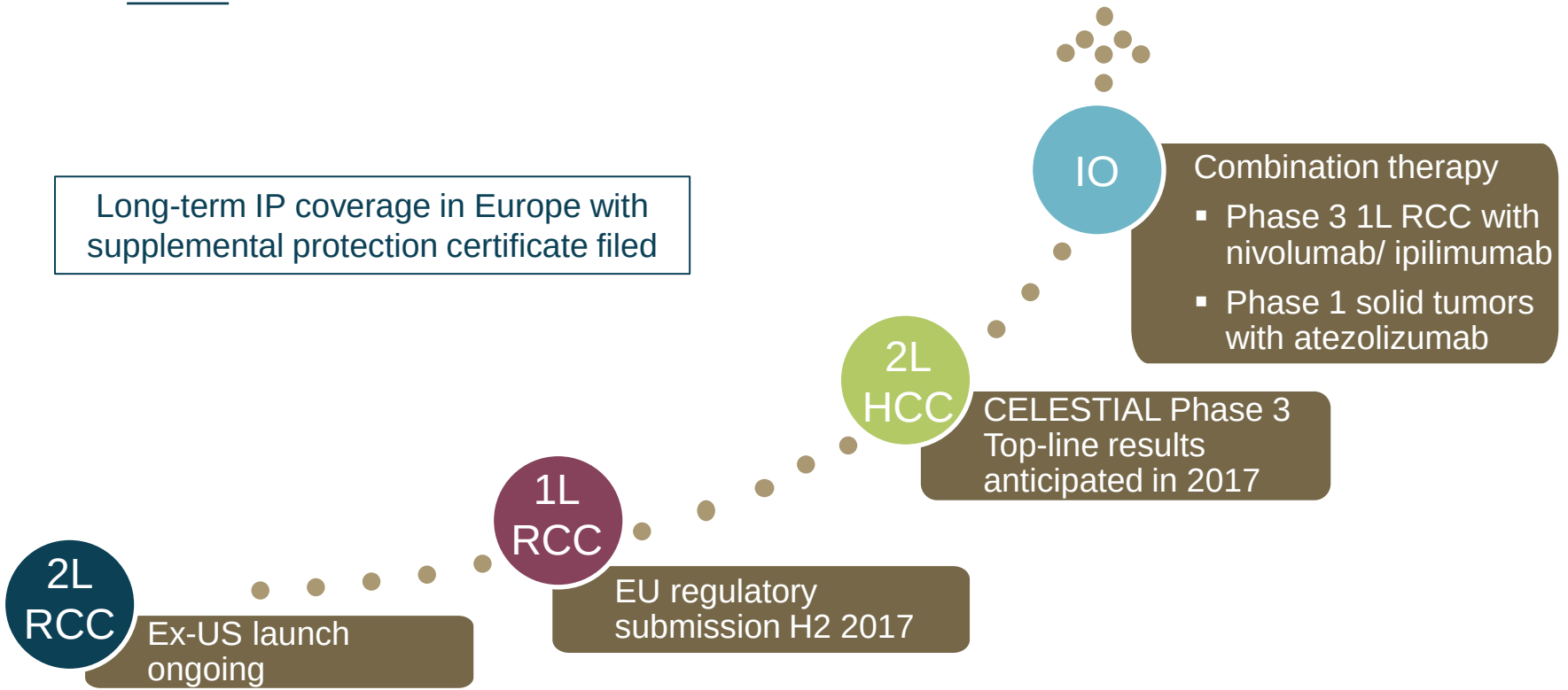
Cabometyx® accessible through managed access program *(+ post-ATU in France)*

ATU: Autrorisation Temporaire d'Utilisation; RCC: Renal Cell Carcinoma

Source: Kantar Health Prescription Tracker Q4 2016 (quantitative research based on 70 physicians & 804 patient record forms in Germany & 50 physicians & 601 patient record forms in UK

03 Potential expansion of Cabometyx® franchise to exceed initial peak sales estimate of €150 - €250m in 2L RCC

Long-term IP coverage in Europe with supplemental protection certificate filed



HCC: Hepatocellular Carcinoma; IO: Immuno-Oncology; IP: Intellectual Property; RCC: Renal Cell Carcinoma

IPSEN Innovation for patient care

03 Potential to expand to 1L RCC market

Cabozantinib is the first and only therapy to demonstrate superiority in 1L RCC versus sunitinib, the current SoC, in terms of PFS, ORR and showing a positive trend in OS with a similar safety profile

CABOSUN Phase 2 study in 1L RCC

Design: Randomized Phase 2 trial of cabozantinib vs. sunitinib in intermediate to poor risk patients with previously untreated advanced RCC

Primary endpoint: Progression-free survival (PFS)

Results:

- PFS = 8.2 months for cabozantinib vs. 5.6 months for sunitinib
- Clinically meaningful and statistically significant 31% reduction in disease progression / death
- Objective response rate significantly improved: 46% for cabozantinib vs 18% for sunitinib
- Favorable PFS across patient subgroups: intermediate vs poor-risk and presence/ absence of bone metastases

Next steps

- Regulatory submission: H2 2017
- Potential regulatory decision: 2018
- Followed by Health Technology Assessment (HTA) and pricing discussions

1L market opportunity

- Consolidate cabozantinib as the SOC in 1L RCC
- Larger pool of patients and longer duration of therapy than 2L
- Offset by lower pricing, cannibalization of 2L+ market

ORR: Objective Response Rate; OS: Overall Survival; RCC: Renal Cell Carcinoma; SOC: Standard of Care

03 Cabometyx® roadmap

- Drive successful launch execution in 2L RCC through dedicated team
- Differentiate vs. immunotherapy as monotherapy and other targeted therapies
- Expand Cabometyx® potential in new indications and in combination therapy with IO drugs to further improve response rates

IO: Immuno Oncology; RCC: Renal Cell Carcinoma

Onivyde®

Cynthia Schwalm

President, North America Commercial Operations

IPSEN
Innovation for patient care

AMBITION

To establish Onivyde® as standard of care in metastatic pancreatic cancer

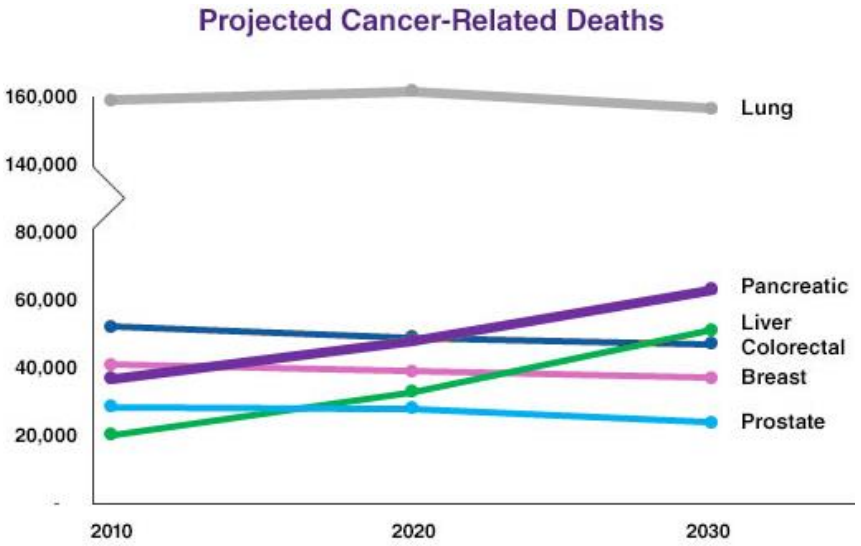
IPSEN
Innovation for patient care

03 Pancreatic cancer, a rare but aggressive tumor with poor prognosis

Pancreatic cancer is rare

Accounting for <5% of all new cancer cases but is the #3 cancer in number of deaths

- ~53,000 new cases in 2016
- ~41,000 deaths in 2016
- By 2020, expected to be the 2nd leading cause of cancer-related death

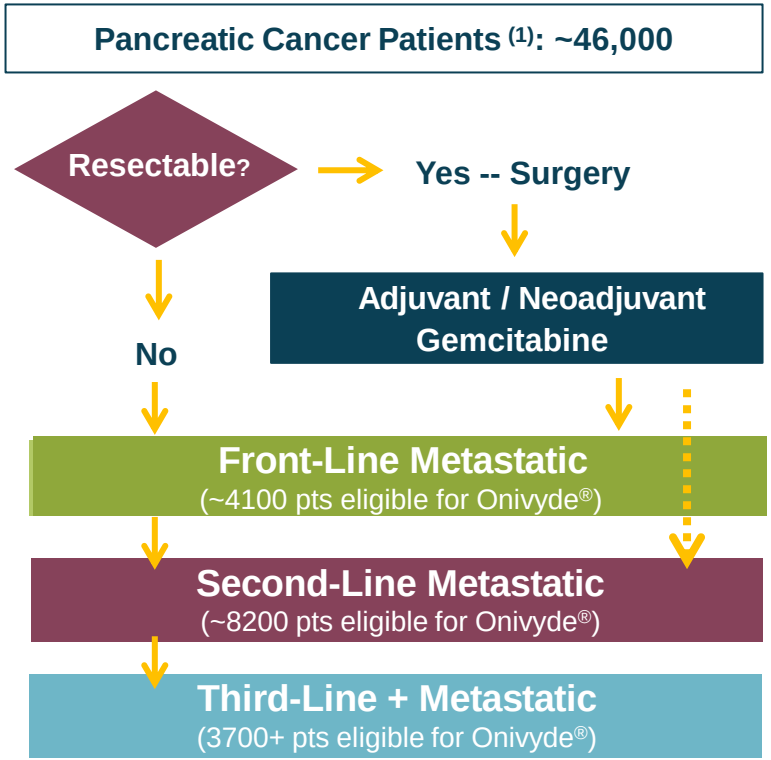


Half of all patients are diagnosed in the metastatic setting

- Survival rates are dismal across all settings
- 5 year survival rates for metastatic pancreatic cancer: 2.6%

SEER Data base

03 Significant opportunity in U.S. metastatic pancreatic cancer



ONIVYDE® approved for:

the treatment of patients with metastatic adenocarcinoma of the pancreas after disease progression following gemcitabine-based therapy, in combination with fluorouracil and leucovorin

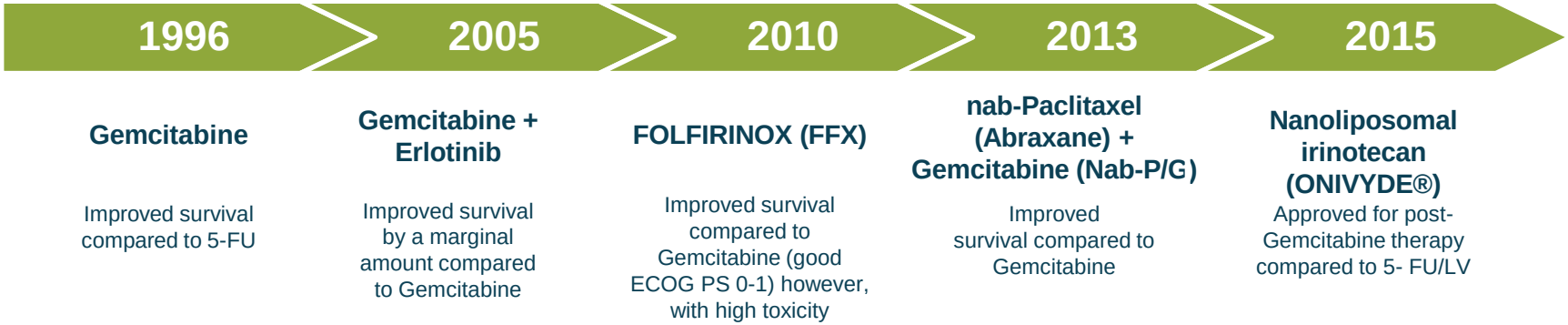
ONIVYDE®-eligible patients

- ✓ **Metastatic pancreatic cancer**
- ✓ **Disease progression following gemcitabine**

(1) Source: ACR 2016 estimated U.S. incidence

IPSEN Innovation for patient care

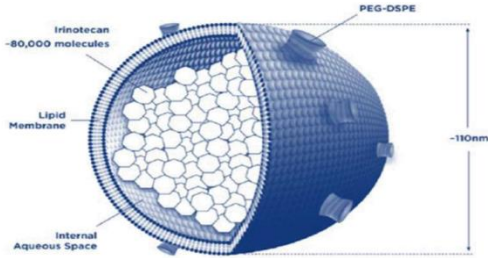
03 Few improvements to the pancreatic cancer treatment paradigm in the last 20 years



…With a high failure rate of Phase 3 trials

03 Onivyde® profile and differentiation

Differentiated product for metastatic pancreatic cancer



- ✓ First and only FDA-approved therapy in post-gemcitabine pancreatic cancer
- ✓ Novel encapsulation of irinotecan
  - Superior PK profile
  - Selective accumulation at tumor site
- ✓ IP and orphan drug exclusivity providing protection until 2028 with potential for extensions through 2036

Category 1 evidence in NCCN guidelines

NCCN

THE LANCET

- ✓ ONIVYDE + 5-FU/LV significantly improved OS among patients previously treated with gemcitabine-based therapy
- ✓ Superior PFS, ORR and TTF in patients receiving ONIVYDE + 5-FU/LV
- ✓ NAPOLI-1 study published in Lancet

FU/LV: Fluorouracil/ Leucovorin; NCCN: National Comprehensive Cancer Network; ORR: Objective Response Rate; OS: Overall Survival; PFS: Progression-Free Survival; PK: Pharmacokinetics; TTF: Time to Treatment Failure

03 Onivyde® launch to leverage U.S. Oncology commercial expertise

- Dedicated and experienced team of ~180 professionals including sales, marketing, reimbursement, medical affairs, patient/ payor services
- Extensive Oncology experience in pancreatic cancer
- Track record of successfully launching to key stakeholders in pancreatic cancer market
- ~65% overlap with Somatuline® call points

3x increase in share of voice under Ipsen vs Merrimack

Accelerate growth trajectory and maximize potential of Onivyde®

03 Onivyde® integration update

- Oncology Sales, Value & Access and Medical Teams training complete
- Promotion of Onivyde® with focus on clinics initiated
- Multiple medical activities planned for ASCO 2017
- U.S. commercial infrastructure fully adapted to the pancreatic cancer market
- Positive early feedback from our oncology accounts and trade
- Collaboration with Shire ongoing for global clinical development plan

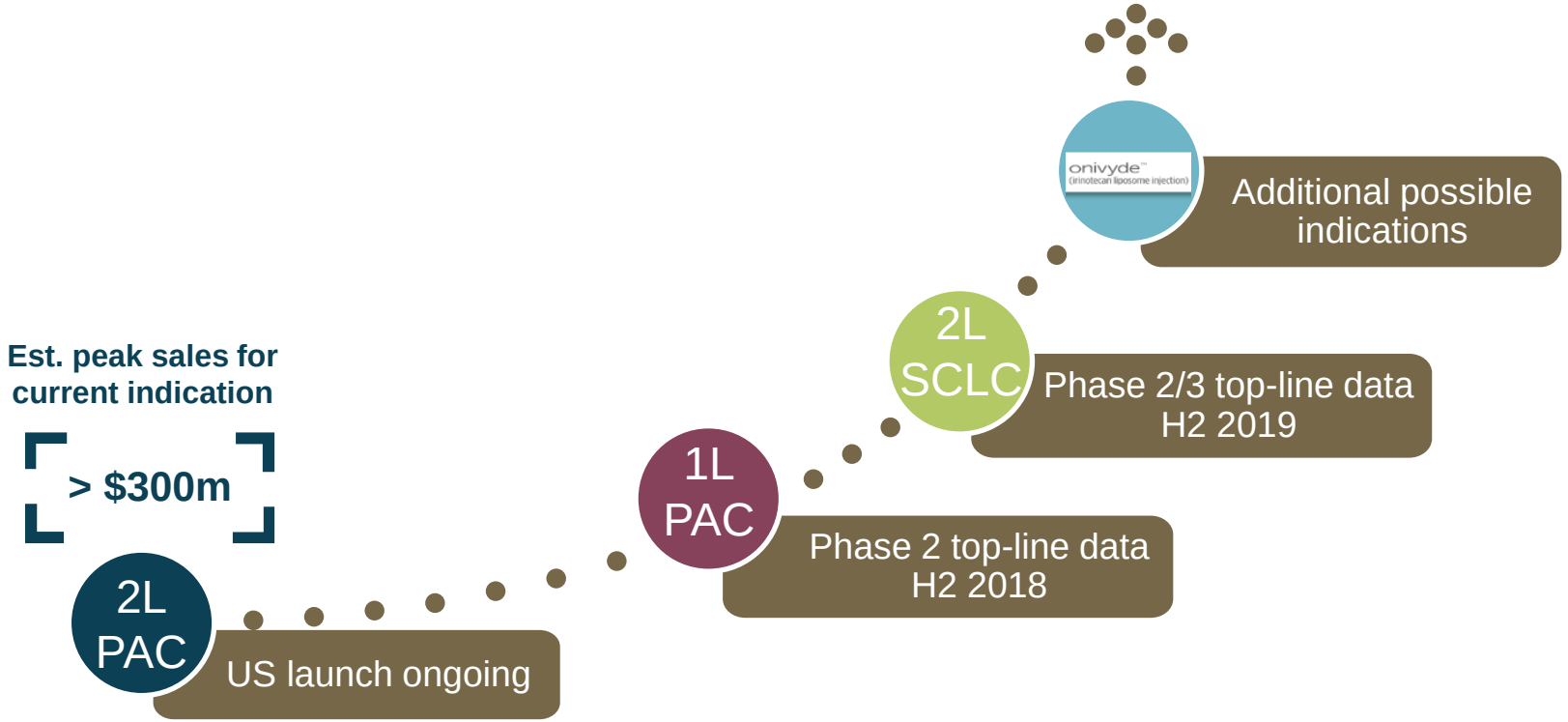
ASCO: American Society of Clinical Oncology

03 Proven U.S. Oncology commercial engine to accelerate growth trajectory

Field force	Channel prioritization	Market positioning	Medical/HEOR
▪ 3x expansion ▪ Performance-driven compensation ▪ Marketing programs and investments ▪ Key account management	▪ Drive breadth/ depth in institutions ▪ Educate on reimbursement - J code effective since Jan 2017 ▪ Partner/contract with GPOs	▪ Standard of care in post-gemcitabine 2L and penetrate 1L recurrent market ▪ Maximize dose/ duration on therapy	▪ Advance scientific differentiation ▪ Enhance value proposition story ▪ Engage thought leader community

GPOs: Group Purchasing Organization; HEOR: Health Economics and Outcomes Research

03 Expansion potential of Onivyde® franchise



PAC: Pancreatic Adenocarcinoma; SCLC: Small Cell Lung cancer

IPSEN Innovation for patient care

03 Onivyde® roadmap

- Leverage proven existing U.S. Oncology organization to accelerate growth trajectory
- Educate physicians and patient groups on differentiated clinical profile and NCCN guideline recommendations
- Execute LCM in additional lines of therapy and indications

LCM: Life Cycle Management; NCCN: National Comprehensive Cancer Network

Dysport®

Harout Semerjian

President, Specialty Care International Region
& Global Franchises

AMBITION

To build a leading neurotoxin franchise with Dysport® and innovative next-generation neurotoxins

03 Dysport®: Established worldwide presence in neurotoxin market

Background

More than 25 years of experience with botulinum toxin A (BoNT-A):

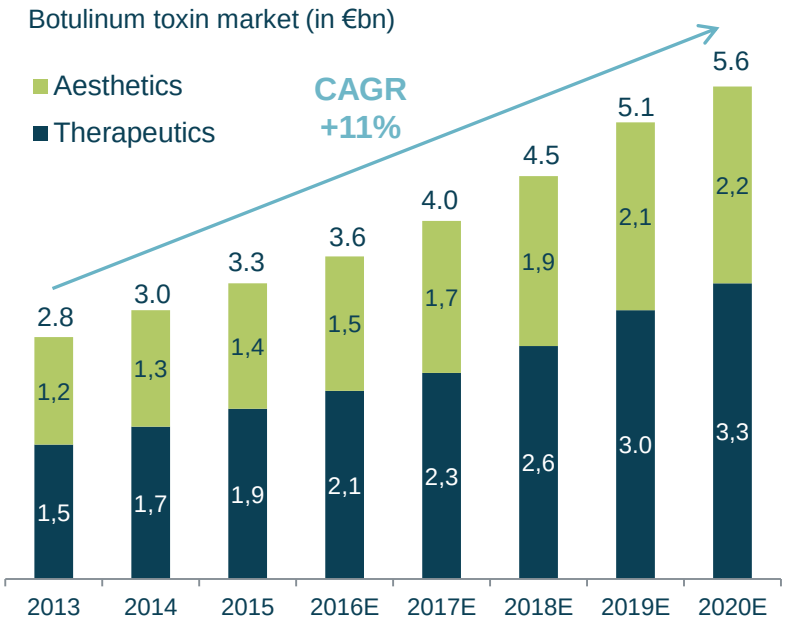
- 1980s: First clinical use of BoNT-A in the UK
- 1982 – First patients treated with British BoNT-A at CAMR (Centre for Applied and Microbiological Research)
- 1991 – Dysport® launched in UK before joining the Ipsen Group
- 1994 – Exclusive worldwide license agreement for the use the BoNT-A with Public Health England

Dysport® is approved in 80 countries and in 7 therapeutic and aesthetic indications

Dysport® marketed countries

03 Dynamic and attractive neurotoxin market

Attractive botulinum toxin market



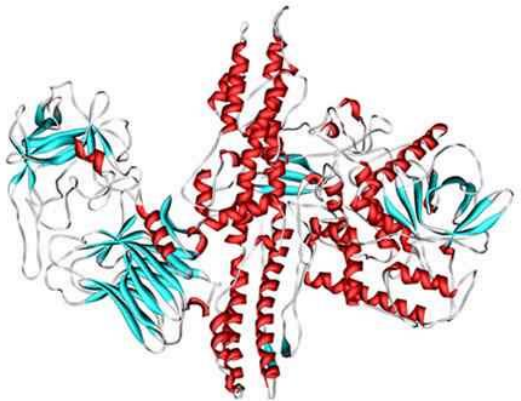
- Market split between U.S. (~44%) and ex-U.S. (~56%)
- Market split between Aesthetics (~42%) and Therapeutics (~58%)
- Market growth rate expected to continue for the foreseeable future
- High barriers to entry with specialized and highly regulated biologic and weapons-grade manufacturing process

Source: Daedal Research, Global Botulinum Toxin Market: Size, Trends and Forecasts (2016-2020)

03 Dysport®: A unique product to manufacture

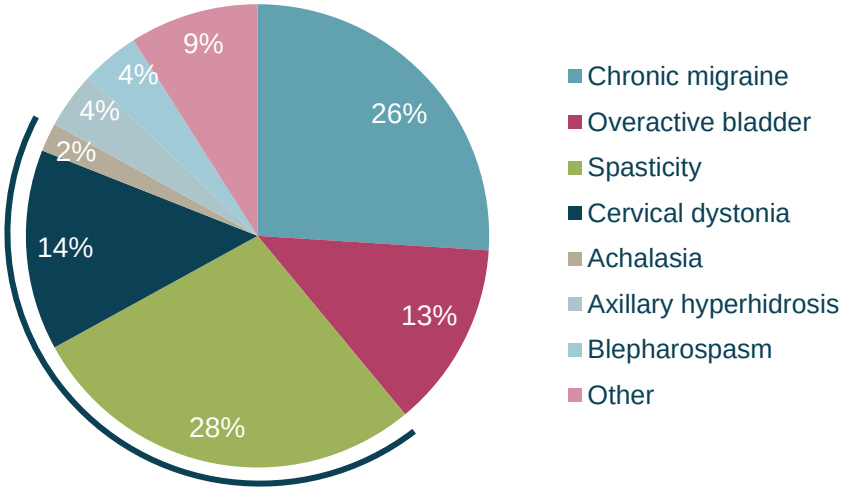
25 years of expertise, commitment and investments to continue delivering a high-quality product worldwide elevating standards for all manufacturers

- Highly complex production processes difficult to replicate and executed by staff with substantial and unique expertise in toxin manufacturing
- State-of-the-art drug product manufacturing facility which utilises a technology that isolates the product, not only from the environment, but the people working in the area
- Biohazard subject to strict governmental oversight and compliance with stringent Good Manufacturing Practice regulations
- Lack of explicit biosimilar guidelines is barrier for generics / biosimilars



03 Focus on select indications in Therapeutics

Global therapeutics market (€1.9bn in 2015)



Ipsen's addressable market ~50%

Performance by geography

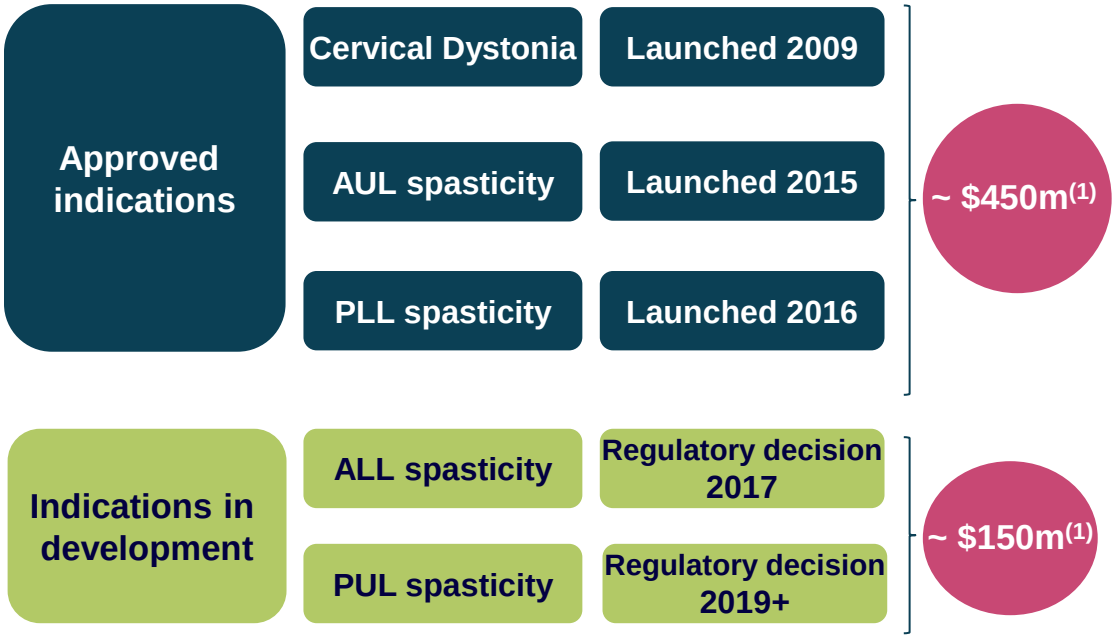
- #2 in EU markets (UK, DE, IT)
- Market leader in Brazil and Russia
- Limited market share in U.S.

Strategic objectives

- Grow share in adult and pediatric spasticity
- Expand into select indications beyond spasticity
- Demonstrate leadership and innovation with liquid formulation and recombinant toxins

Source: Daedal Research, Global Botulinum Toxin Market: Size, Trends and Forecasts (2016-2020)

03 U.S. Therapeutics commercial opportunity



Increase spasticity market share

- Building critical mass for more effective U.S. market launch
- Large opportunity to grow market share

U.S. Neurotoxin commercial capabilities

- Experienced leadership team, ~30 person dedicated sales team
- 1st and only approved BoNT-A for the treatment pediatric spasticity in the U.S. with orphan exclusivity
- Focused on near and longer-term account and channel opportunities where Dysport® is supported by approved indications

Note: ALL: Adult Lower Limb; AUL: Adult Upper Limb; PLL: Pediatric Lower Limb; PUL: Pediatric Upper Limb
(1) Source: Company estimates

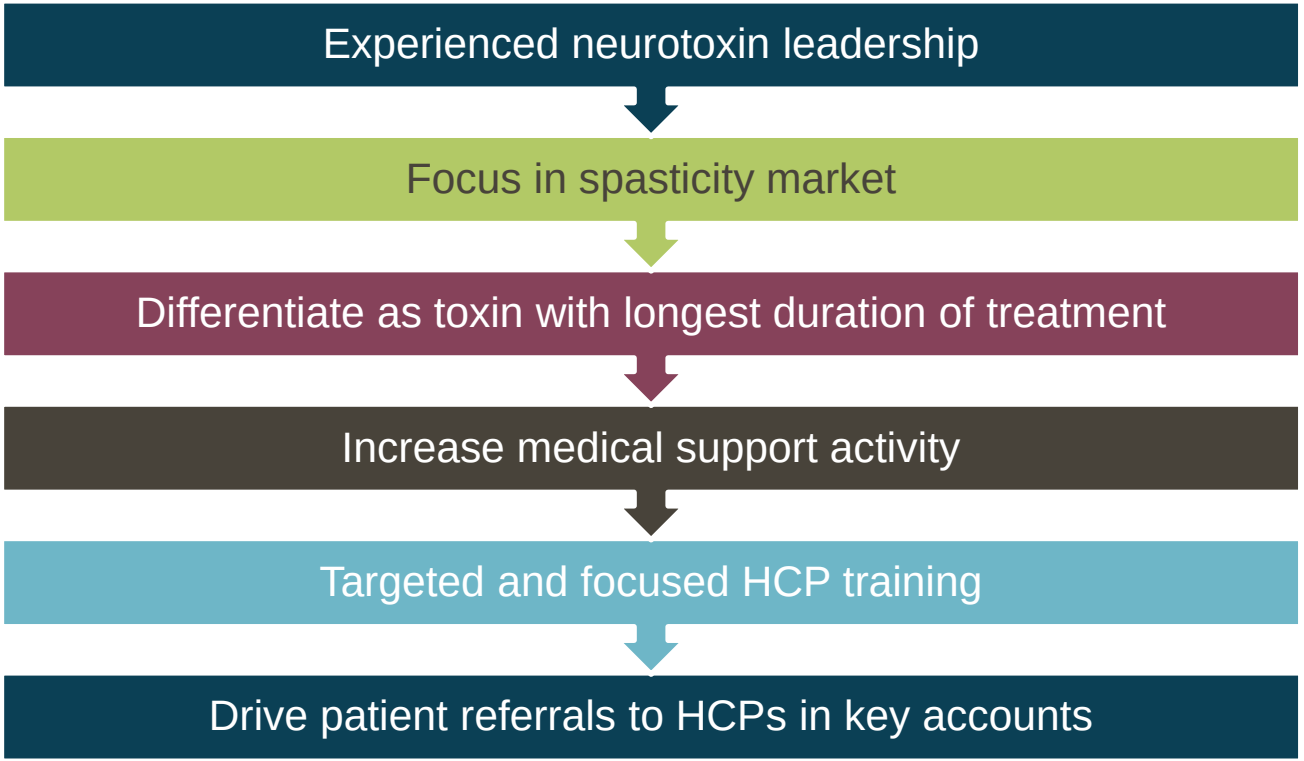
IPSEN Innovation for patient care

03 U.S. Therapeutics: Levers to accelerate growth

Medical	▪ Differentiate as toxin with longest duration of treatment ▪ Engage high-impact KOLs ▪ New indications (AUL, PLL)
Market access	▪ Establish inclusion in formularies of major accounts ▪ Ensure competitive reimbursement support, insurance verification
Sales force	▪ Focus on existing Dysport® prescribers and new large accounts
Patient advocacy	▪ Communicate medical benefits and value proposition in patient communities

Note: AUL: Adult Upper Limb; KOLs: Key Opinion Leaders; PLL: Pediatric Lower Limb

03 Therapeutics in Europe: Factors for success to increase market share



HCP: Healthcare Provider

03 Dysport® Aesthetics performance driven by Galderma partnership

Partnership with Galderma

- 2007: Initial development and commercialization agreement in Europe, certain territories in Eastern Europe and Central Asia, Brazil, Argentina
- 2014: Expanded agreement to include the U.S., Canada
- 2016: Further expansion to China, India, South Korea

GALDERMA

Growing aesthetics business

- Growth driven by the U.S., emerging markets (China) and favorable market dynamics
- Successful partnership with Galderma for commercialization and R&D
  - Galderma commercial partner in all geographies except Russia and Middle East
  - Territories >75% world aesthetics market, ongoing geographic expansion
  - Very profitable business with limited S&M and R&D investments
- Strong growth in Ipsen-led aesthetics sales (Russia, Middle East…)

03 Dysport® roadmap

- Accelerate penetration of therapeutics and aesthetics markets
- Committed to build U.S. therapeutics share – only toxin manufacturer with FDA approvals in spasticity across adult and pediatric patient populations
- Identify and initiate new indication studies for Dysport®
- Develop innovative next generation toxins

Q&A

IPSEN
Innovation for patient care

04

Consumer Healthcare

Benoit Hennion
President Consumer Healthcare

AMBITION

To establish a sustainable and growing Consumer Healthcare business

04 From Primary Care to Consumer Healthcare (CHC)

Active optimization

- Focused on profitability
- Limited investment

Maximization of the existing assets & geographies

- Re-investment
- Focus on GI
- Transformation towards OTx

Establish a **sustainable and growing Consumer Healthcare** business

2014 2017 2020

GI: Gastrointestinal; OTx: Combination of prescription and over-the-counter

IPSEN Innovation for patient care

04 OTx model to increase sales

Combine benefits from typical Rx Primary Care model and typical OTC model

- Leverage OTC codes to optimize prescription status, pricing, consumer advertising
- Leverage promotion focus from physicians, pharmacists and consumers and benefit from both product therapeutic strength and brand power
- Drive revenue from prescriptions, pharmacy recommendations and patient demand

OTC: Over The Counter; OTx: Combination of prescription and over-the-counter; Rx: Prescription

04 From Primary Care to Consumer Healthcare (CHC)

Active optimization

- Focused on profitability
- Limited investment

Maximization of the existing assets & geographies

- Re-investment
- Focus on GI
- Transformation towards OTx

Establish a **sustainable and growing Consumer Healthcare** business

2014 2017 2020

GI: Gastrointestinal; OTx: Combination of prescription and over-the-counter

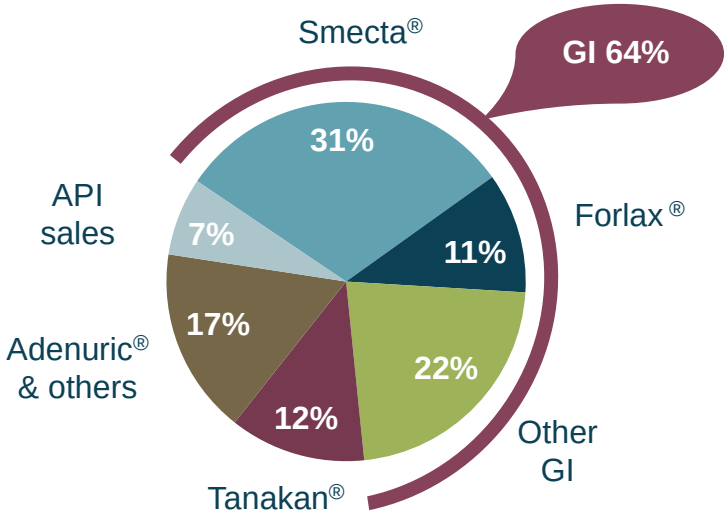
04 Evolution of Ipsen Consumer Healthcare portfolio

	GI				Cognitive disorders	Others
	Diarrhea	Irritable Bowel Syndrome / Ulcerative colitis	Constipation	Bowel cleansing		
Key brands		*(China)*				*(Gout)*
Launches from 2015-2016						
New products in 2017		*(Central Europe)*				*(Pain, France)*

GI: Gastrointestinal

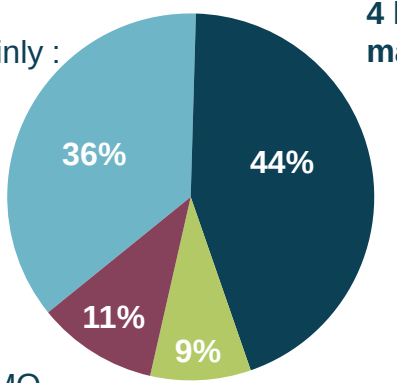
04 Consumer Healthcare today

Revenues by brand / indication



Revenues by geography

Europe - mainly :
- France
- CEE
- Italy



4 key emerging markets
- China
- Russia
- Algeria
- Vietnam

Figures based on 2016 revenues
API: Active Pharmaceutical Ingredient; CEE: Central and Eastern Europe; CMO: Contract Manufacturing Organization; GI: Gastro Intestinal

04 Market dynamics & challenges

Market dynamics

- Increased health awareness
- Trend toward patient self-medication along with HCP recommendation
- Demand for convenient and innovative products
- Increasing household healthcare spend in emerging markets
- Long-term sustainability of revenues driven from out of pocket expenses built on brand equity
- Market growth rate expected to be 4.5% (2015-2020 CAGR(1))
- Multi-local market situations (rather than global)

Market challenges

- CHC markets highly sensitive to macroeconomics in the short-term
- Unpredictability of emerging market government policies
- Continuing and significant increase in cost of doing business, eg:
  - Competition in media campaigns
  - Quality standards required

CHC: Consumer Healthcare; HCP: Healthcare Practitioner;
(1) Nicolas Hall & Company, FY 2015

04 Ability to establish sustainable winning CHC business

- Portfolio adapted to OTx
- Several brands with a “consumer” potential to leverage; Smecta® already expanding its brand footprint
- Strong foundations in select emerging markets
- OTx structures mostly in place in the existing geographies
- Encouraging successes in the last 18 months at :
  - Attracting experienced OTC talent
  - Building new capabilities including medical device and food supplement registrations
  - Expanding the portfolio and the geographical footprint through Business Development
- Agility of a mid-size player

Smecta® brand strength in core markets

Overall satisfaction score in GI disorders*

TOP 1 in France

TOP 1 in China

TOP 5 in Russia

*Source: Consumer Satisfaction Study conducted in 2014 - Ipsen-GFK SMECTA® Brand Territory Extension Survey
CHC: Consumer Healthcare; OTx: Combination of prescription and over-the-counter; OTC: Over-the-Counter; GI: Gastrointestinal

04 Steps to achieve ambition

Finalize the model transformation from Rx into OTx

Leverage our three key brands Smecta®, Forlax® & Tanakan® through consumer innovations

Leverage critical portfolio mass

OTx: Combination of prescription and over-the-counter; Rx: Prescription

04 Smecta® brand leverage in the French market

Umbrella brand strategy

Phase 1
BRANDING

Phase 2
EXTENSION

Phase 3
STRETCH

New capabilities

- **Medical device** & **food supplements** regulatory & quality
- Access to a **quality pharmacy sales force**
- Pharmacy **commercial policy** making
- **Direct-to-consumer** marketing & communication

Positive results

- **Increase in the overall brand volume growth**
- **39% market share** in the **diarrhea self-medication** market in 2016
- **4 awards for Smecta® DTC campaign** in France

DTC: Direct To Consumer

04 Expansion of the OTC portfolio in Europe

Sanofi Consumer Healthcare

- **Opportunistic transaction** from EU Commission mandate to divest Sanofi assets
- **Key asset Prontalgine®** in France accelerates OTx strategy to gain critical mass at pharmacies
- **Significant synergies**

Prontalgine®

- Market leader in France with 36% market share
- OTC pain killer for treatment of moderate to severe pain
- Double-digit growth over the last four years

Buscopan®

- 6 Central Eastern European countries
- OTC GI product for the treatment of abdominal cramping, pain and discomfort
- 6 - 21% market share depending on the country

GI: Gastro Intestinal; OTC: Over The Counter; OTx: Combination of prescription and over-the-counter

04 European footprint extension to Italy

Attractive market in Italy

- Large OTC pharma market
- Largest probiotic market in Europe / Top 3 worldwide
- Possibility to leverage Smecta® and Forlax® (currently marketed through partners)
- Direct leverage of the global investments on brands

Ipsen CHC in Italy today

- Marketing authorizations holder for Smecta® (Diosmectal) and Forlax® (Paxabel)
- Commercialization through partners

What the Akkadeas transaction brings

- Access to commercialization platform experienced in retail & GI
- Ready to leverage Ipsen portfolio
  - Smecta® as early as 2017
  - From 2018, launches of Smecta® Stick, Forlax® new forms and Smebiocta®
- Existing GI portfolio including probiotics

CHC: Consumer Healthcare; GI: Gastro Intestinal; OTC: Over The Counter

04 Strategy to capture growth in Emerging Markets

China

- Smecta® and Etiasa® market leaders
- Reinforce retail sales organization to grow market share
- Enhance portfolio
- Maximize distribution model

Russia

- Smecta®, Fortrans® and Tanakan® market leaders
- Optimize distributor relationships
- Build on success of Smecta® brand extension
- Execute on leveraging Tanakan® as a brand

Algeria

- Smecta® and Forlax® market leaders
- Establish local manufacturing agreements
- Reinforce pharmacy promotion capabilities

DTC: Direct To Consumer

04 Consumer Healthcare roadmap

- Leverage strong brand awareness to transform to OTx commercial model
- Strengthen core portfolio through lifecycle management of leading brands
- Capture growth and underlying market dynamics in Emerging Markets (China and Russia)
- Balance Emerging Markets exposure with strengthened European business
- Deliver 4-6% sales growth per year with a contribution from recent acquisitions and existing products

OTx: Combination of prescription and over-the-counter

05

R&D

Alexandre Lebeaut, M.D.
Chief Scientific Officer

AMBITION

To develop a valuable and sustainable portfolio delivering at least one new molecular entity or meaningful indication/registration every year

05 Recent portfolio achievements since 2016

Approvals

Submissions

Dysport®
PLL (EU)

Dysport®
ALL (U.S., EU)

Somatuline®
Symptom control
NET (U.S.)

Telotristat ethyl
Carcinoid syndrome
(EU)

ALL: Adult Lower Limb; NET: Neuroendocrine Tumors; PLL; Pediatric Lower Limb;
RCC: Renal Cell Carcinoma

05 A new R&D model for Ipsen

Research investment with selective focus

- External sourcing of innovation to feed internal R&D with assets at various stages of the development process
- Regular assessment of internal R&D pipeline to prioritize resource allocation

Development powerhouse

- Successfully integrate and develop newly-acquired assets in the pipeline
- Accelerate development programs with the focus, quality and speed of a biotech

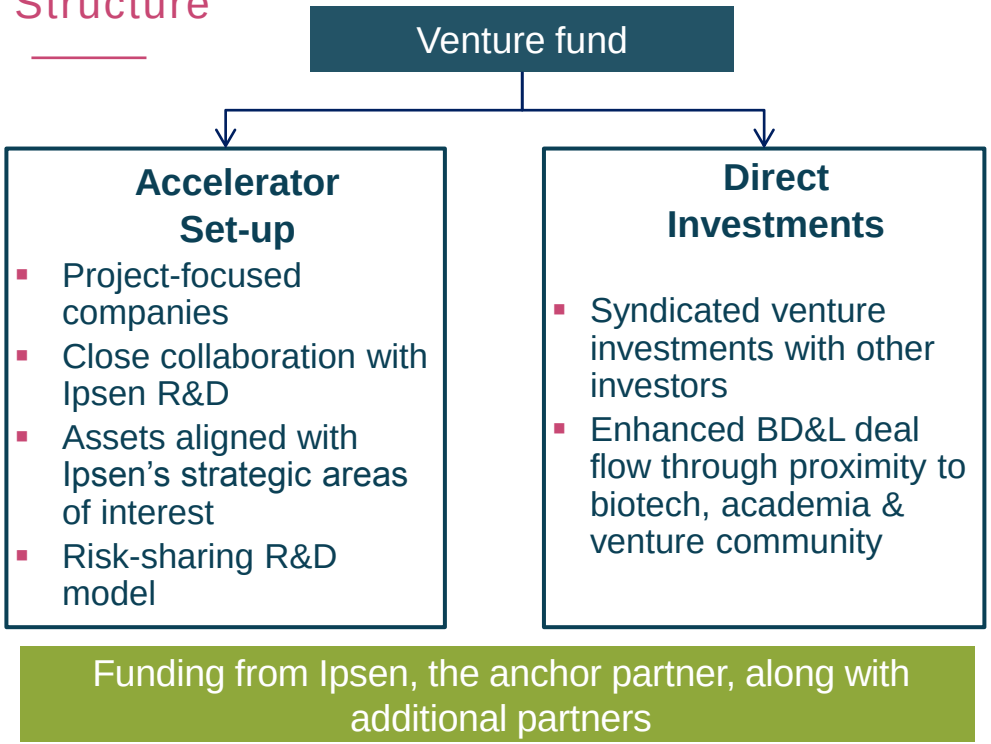
To develop a valuable and sustainable portfolio delivering at least one new molecular entity or meaningful indication/ registration every year

05 Building a balanced portfolio to sustain growth

	Actions	Enablers
External sourcing of innovation	▪ Focus on 3 core Therapeutic Areas: Oncology, Neurosciences and Rare Diseases ▪ Replenish pipeline with differentiated Phase 1-ready or later assets ▪ Bolster incubator model	▪ State-of-the-art “search and evaluate” organization ▪ Geographical footprint : leverage presence at ecosystems of innovation ▪ Expertise of dedicated subject-matter experts across the value chain of due diligence process ▪ Partnering with venture fund to build early-stage incubator
Internal research portfolio prioritization	▪ Strategic review / prioritization of pipeline to accelerate priority assets ▪ Increase relative focus on the toxin platform	▪ Value-based R&D portfolio management approaches to re-allocate resources

05 Incubator model of innovation with venture fund

Structure



Purpose

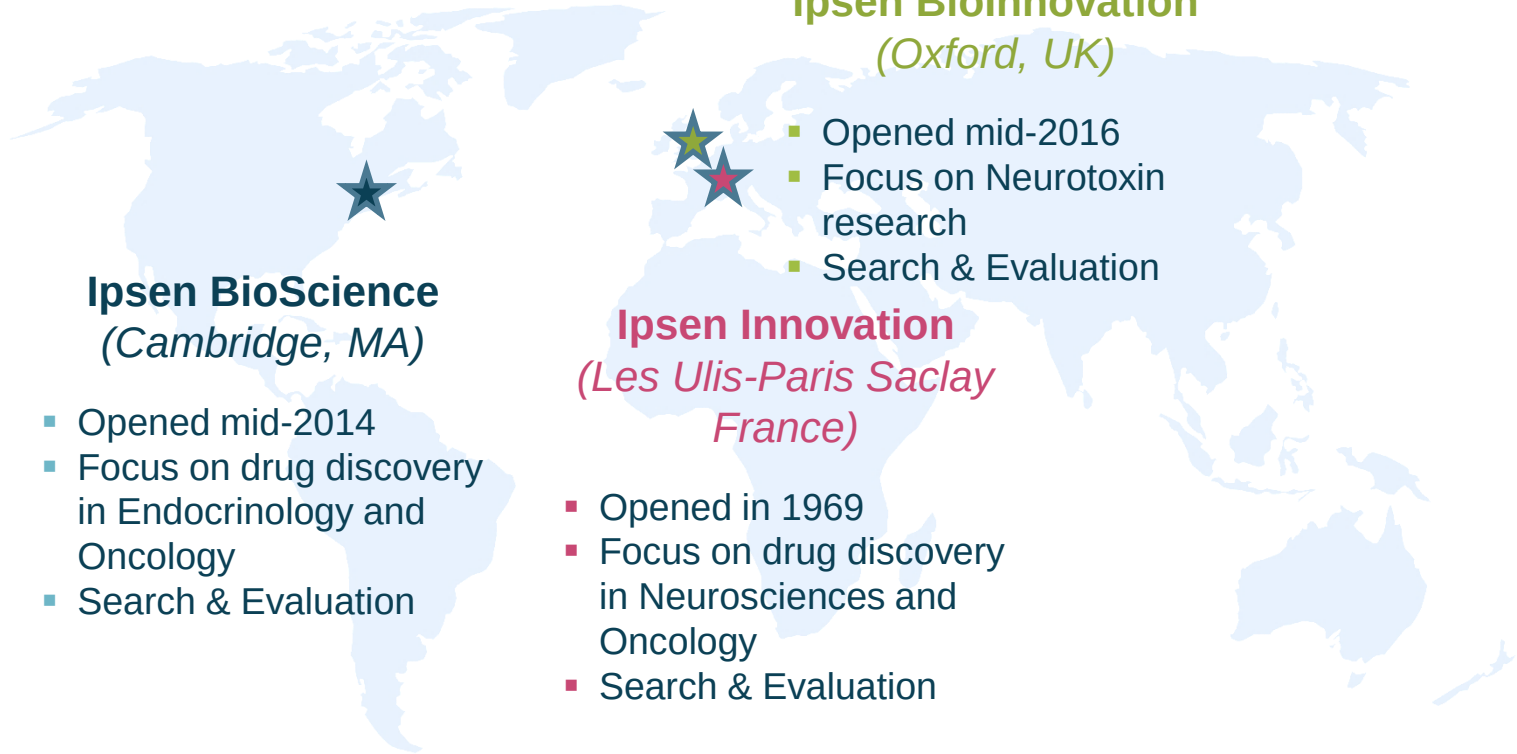
- **Augment Ipsen R&D pipeline** through portfolio of investments and project focused companies without competing for internal resources and by leveraging external capital
- **Provide Ipsen with a window into innovative science** from top-tier U.S. universities & entrepreneurs

05 Transform R&D into a Development Powerhouse

	Actions	Enablers
Integrate and develop newly-acquired assets	▪ Incorporate new assets in the pipeline at various stages of development ▪ Accelerate development timelines to capture full value	▪ Integration capabilities with dedicated expertise/resources and improved processes
Accelerate execution of development programs	▪ Accelerate and deliver programs/activities with the focus, quality and agility of a biotech ▪ Value driven development strategy	▪ Empowered, high-performing teams with talent in key roles ▪ Data-driven development strategies to accelerate go/ no-go decisions ▪ Increase modelling & simulation capabilities, bioinformatics, predictive toxicology, biomarkers, data governance

IPSEN Innovation for patient care

05 3 R&D centers located in major ecosystems of scientific innovation



Ipsen BioScience
(Cambridge, MA)

- Opened mid-2014
- Focus on drug discovery in Endocrinology and Oncology
- Search & Evaluation

Ipsen BioInnovation
(Oxford, UK)

- Opened mid-2016
- Focus on Neurotoxin research
- Search & Evaluation

Ipsen Innovation
(Les Ulis-Paris Saclay France)

- Opened in 1969
- Focus on drug discovery in Neurosciences and Oncology
- Search & Evaluation

05 Open innovation and partnerships

Early-stage development and academic

Late-stage development and commercial

IPSEN
Innovation for patient care

05 Oncology pipeline

Product	Indication	Phase I	Phase II	Phase III	Registration
Somatuline®	NET lung				
	NET & Acromegaly (PRF)				
	Acromegaly - China				
Cabometyx®	RCC 1L				
	HCC 2L				
Onivyde®	1L Previously untreated metastatic pancreatic cancer				
	SCLC 2L				
	Breast cancer				
Decapeptyl®	Endometriosis – China				
Telotristat ethyl	GEP NET 2L (symptoms) - EU				
Theranostic program (PRRT)	NET imaging				
	GEP-NET 2L				

GEP-NET: Gastroenteropancreatic Neuroendocrine Tumors; HCC: Hepatocellular Carcinoma; PRF: Prolonged Release Formulation; PRRT: Peptide Receptor Radionuclide Therapy; RCC: Renal Cell Carcinoma; SCLC: Small Cell Lung Cancer

05 Cabometyx®: Potential to expand in 1L RCC

CABOSUN: Phase 2 trial for 1L RCC[1]

- Design: Randomized Phase 2 trial of cabozantinib vs. sunitinib in intermediate to poor risk patients with previously untreated advanced RCC
- Primary endpoint: Progression-free survival (PFS)
- Secondary endpoints: Overall Survival, Objective Response Rate
- Trial conducted by The Alliance cooperative group under NCI-CTEP IND

1:1
randomization
n=157

Arm A - Cabozantinib
60 mg daily

Arm B - Sunitinib
50 mg daily
4 weeks on;2 weeks off

Results

- Primary Endpoint: PFS = 8.2 months for cabozantinib vs. 5.6 months for sunitinib (HR (95% CI)[2]: 0.69 (0.48-0.99); p-value (one-sided) = 0.012
- Clinically meaningful and statistically significant 31% reduction in disease progression / death
- Secondary Endpoint: Median OS = 30.3 months with cabozantinib vs. 21.8 months with sunitinib (adjusted HR, 0.80; 95% CI, 0.50 to 1.26) as of Sept. 2016
- Regulatory filing in H2 2017

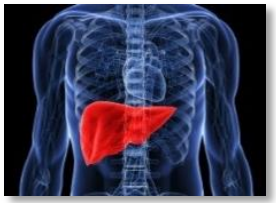
RCC: Renal Cell Carcinoma; OS: Overall Survival
(1) J Clin Oncol 2016; 35:591-597; (2) Investigator-assessed

IPSEN Innovation for patient care

05 Cabometyx®: Phase 3 results in 2017 for 2L HCC

About Hepatocellular Carcinoma[1] (HCC)

- 6th most prevalent malignancy
- Majority of cases caused by cirrhosis from chronic hepatitis B and hepatitis C virus
- ~500K new cases diagnosed each year worldwide (85% in developing countries)
- Sorafenib and regorafenib are the only systemic therapies approved for treating advanced stage HCC



CELESTIAL Phase 3 trial for 2L HCC

- Design: Randomized, double-blind, controlled study of cabozantinib vs. placebo in subjects with HCC who have received prior sorafenib (n=760)
- Primary endpoint: Overall Survival (OS)
- 2nd Independent Data Monitoring Committee review in H2 2017 and if positive, plan to submit in Q1 2018
- Rationale for cabozantinib in HCC[2]:
  - MET over-expression has been observed in advanced HCC
  - Anti-VEGF pathway agents have shown clinical benefit in patients with HCC
  - Simultaneous targeting of the MET and VEGF signaling pathways with cabozantinib may therefore be a promising treatment strategy

(1) World J Hepatol. 2015 May 18; 7(8): 1020-1029.; (2) Journal of Clinical Oncology 30, no. 15_suppl (May 2012) 4007-4007

05 Cabometyx®: Exploring combinations with Immuno-Oncology drugs

Strong rationale for combining cabozantinib with immunotherapy

- Preclinical evidence of cabozantinib's ability to create a more immune-permissive environment
  - Preclinical data suggests cabozantinib increases T-cell infiltration into tumors
- Multiple cabozantinib targets (e.g. VEGFRs, MET, AXL) are implicated in promoting tumor immune-suppression
- Patients dosed with cabozantinib show reduced levels of circulating immune suppressive cells and increased levels of T-cells
- Cabozantinib + nivolumab in Phase 1 trial was well-tolerated and showed promising activity

05 Cabometyx®: Exploring combinations with Immuno-Oncology drugs

1L RCC trial to start in 2017

Phase 3 randomized, open-label study to determine whether cabozantinib combined with nivolumab +/- ipilimumab, is safe and effective compared to sunitinib in previously untreated advanced or metastatic renal cell carcinoma

CheckMate 9ER – Sponsor: Bristol-Myers Squibb, partner Exelixis, Ipsen opted in to share funding

Design

- Cabozantinib + nivolumab vs cabozantinib + nivolumab + ipilimumab vs sunitinib
- Primary endpoint: progression-free survival (PFS)

Sample size: ~1,000 patients

Timelines: FPI June 30, 2017; estimated primary endpoint completion 2020

Metastatic solid tumor trial

Phase 1b dose-ranging study of cabozantinib and atezolizumab in solid tumors

Sponsor: Exelixis, partner Roche, Ipsen opted in to share funding

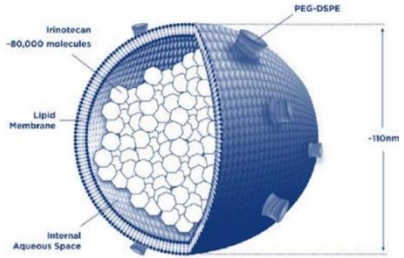
Planned Expansion Cohorts :

- Patients with previously treated advanced RCC
- Patients with previously treated bladder cancer
- Patients with previously untreated bladder cancer (cisplatinum eligible and ineligible)

FPI: First Patient In; RCC: Renal cell carcinoma

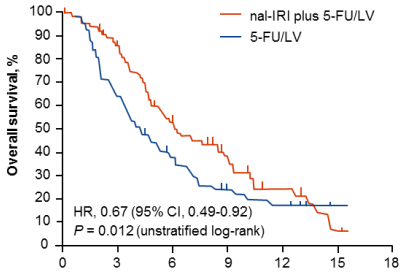
05 Onivyde®: Highly differentiated and clinically proven innovation

Differentiated product for metastatic pancreatic cancer



- ✓ Novel encapsulation of irinotecan (topoisomerase 1 inhibitor)
  - Superior PK profile (longer half-life up to ~170hrs)
  - Prolonged and increased accumulation of SN-38 at tumor site
- ✓ First and only FDA-approved therapy in post-gemcitabine pancreatic cancer

Strong clinical profile in NAPOLI-1 study published in Lancet



- ✓ ONIVYDE/5-FU/LV significantly improved OS among patients previously treated with gemcitabine-based therapy
- ✓ Superior PFS, ORR and TTF in patients receiving ONIVYDE (70 mg/m^2) 5-FU (2400 mg/m^2)/LV(400 mg/m^2) q2w
- ✓ Category 1 in NCCN guidelines for 2L treatment

FU/LV: Fluorouracil/ Leucovorin; NCCN: National Comprehensive Cancer Network; ORR: Objective Response Rate; OS: Overall Survival; PFS: Progression-Free Survival; PK: Pharmacokinetics; TTF: Time to Treatment Failure

05 Onivyde®: Opportunities for indication expansion to meet medical needs

NAPOX Phase 2 study in 1L metastatic pancreatic cancer

- Open-label Phase 2 comparative study in patients with advanced pancreatic adenocarcinoma who have not received prior chemotherapy (n=168)
  - Onivyde + 5 FU/LV + oxaliplatin
  - Onivyde + 5 FU/LV
  - nab-paclitaxel + gemcitabine
- Primary endpoint: Progression-free survival
- Top-line results: mid-2018

RESILIENT Phase 2/3 study in Small Cell Lung Cancer (SCLC)

- Randomized Phase 2/3 trial comparing Onivyde vs. IV topotecan for patients with confirmed SCLC who have progressed on or after platinum-based therapy (n=482)
- Primary endpoint: Overall Survival
- Top-line results: 2019

Global co-development agreement with Shire

05 Peptide Receptor Radionuclide Therapy: Potentially transformative for patients and Ipsen

PRRT to be a game changer in oncology and a unique and valuable opportunity for Ipsen

- **Satoreotide** (SSTR2 antagonist): a unique radiopharmaceutical based theranostic approach
  - With proven MoA and a defined biologic rationale and,
  - Imaging data in conjunction with prospective dosimetry to personalize treatment
- Aligned with Oncology & Rare Disease therapeutic strategy
- Capitalizes on NET leadership and synergies with Somatuline®
- Best-in class strategy and target product profile
- Fully-owned asset with global rights and robust IP

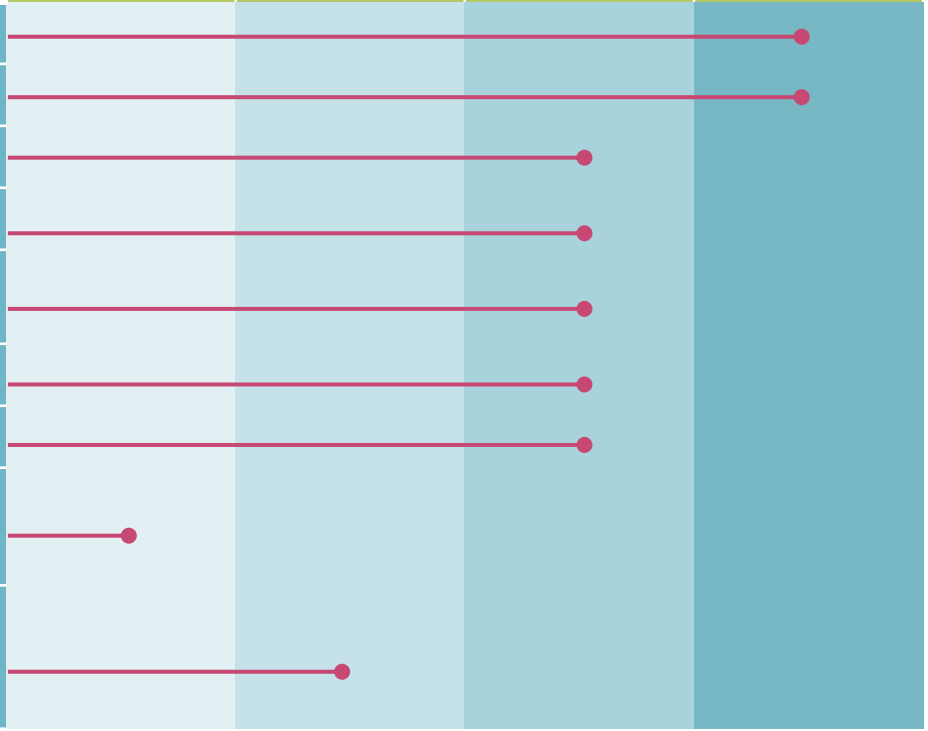
Clinical Development

- Phase 1 Ga-diagnostic trial started Q2 2017
- Phase 1/2 Lu-therapeutic trial started Q1 2017

IP: Intellectual Property; MoA: Mechanism of Action; NET: Neuroendocrine Tumor; PRRT: Peptide Receptor Radionuclide Therapy

05 Neurosciences Pipeline

Product	Indication	Phase I	Phase II	Phase III	Registration
Dysport®	ALL spasticity – U.S.				
	PLL spasticity – EU				
	PUL spasticity				
	Glabellar Lines – China				
	Neurogenic Detrusor Overactivity (NDO)				
Dysport® solution (ex-U.S.)	Cervical Dystonia				
	Glabellar Lines				
Novel recombinant botulinum toxin (BOnT-E)	Early intervention in adult spastic patients				
VSN16R (purchase option)(1)	Spasticity in multiple sclerosis				



ALL: Adult Lower Limb; PLL: Pediatric Lower Limb; PUL: Pediatric Upper Limb
(1) Purchase option granted to Ipsen in February 2015 by Canbex Therapeutics

05 modified recombinant Botulinum NeuroToxin/E ("Short Acting Toxin")

Potential benefits

- **mrBoNT/E** serotype may offer **faster onset of action** and **shorter duration of effect** compared with the marketed rBoNT/A
    - Early muscle relaxation should reduce further development of spasticity (which could happen as soon as 6 weeks post stroke) and reducing its severity by supporting early rehabilitation of the affected limb

Manufacturing

- mrBoNT/E is manufactured with **recombinant technology**

Clinical development

- Animal models confirmed predictive pharmacology
- **Phase 1 First-in-Human** (FIH) **study on-going** to assess the safety and the pharmacodynamic (PD) profile of mrBoNT/E

IPSEN Innovation for patient care

05 modified recombinant Botulinum NeuroToxin/A and A' ("Long Acting Toxin")

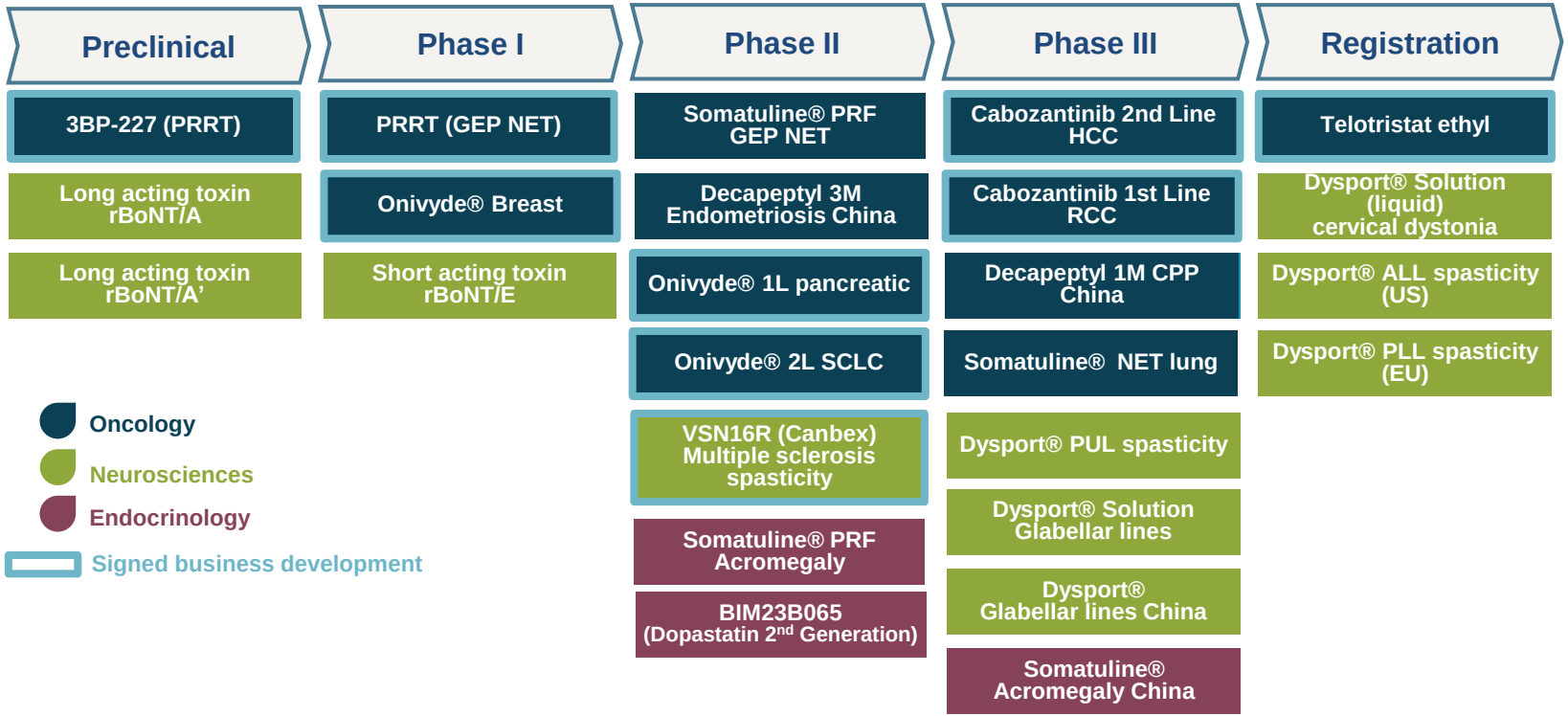
Potential benefits

- **mrBoNT/A and A'** aim at **reducing the distant spread of toxin (via different mechanisms)**
- Preclinical demonstration of an **enhanced therapeutic index** allowing administration of higher doses and leading to **extended duration of action** in comparison to control BoNT/A
- A new **safe and longer acting toxin** would address the need for less frequent injection cycles and considered as of high benefit for patients suffering from spasticity

Clinical development

- In pre-clinical development
- Phase 1 to start in **2019**

05 Sustainable R&D pipeline



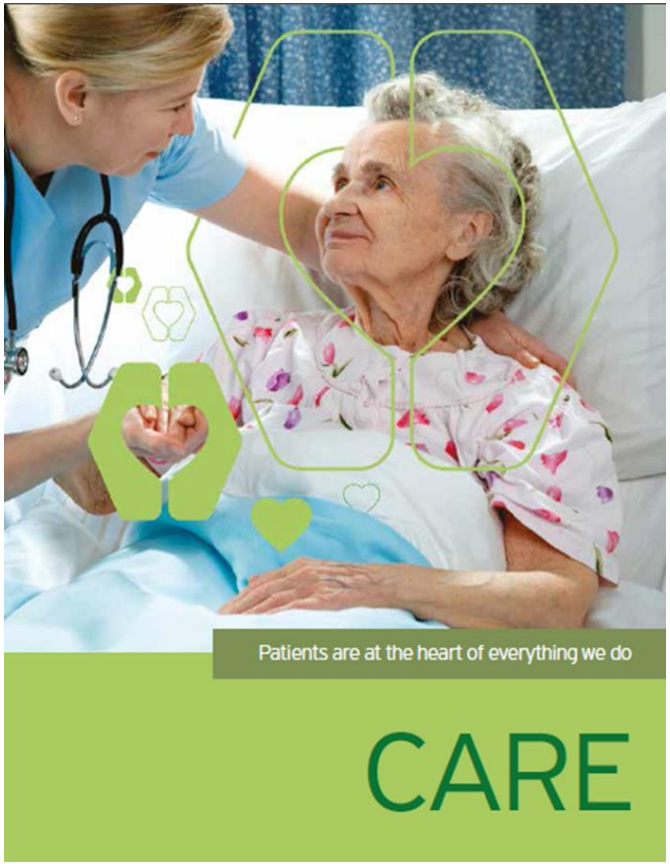
05 Regulatory decision horizon

Product	2017	2018	2019	2020
Somatuline autogel	Symptom control NET (U.S.)	4-in-1 device		Acromegaly (China)
CABOMETYX™ (cabozantinib) tablets 60 mg | 40 mg | 20 mg		CABOSUN 1L RCC (EU)	CELESTIAL 2L HCC (EU)	
Telotristat ethyl	Carcinoid Syndrome (EU)			
Dysport® BOTULINUM TOXIN TYPE A	Adult Lower Limb spasticity (US) Pediatric Lower Limb spasticity (EU)	Dysport® solution Glabellar lines (EU)	Dysport® solution Cervical Dystonia (EU)	Neurogenic Detrusor Overactivity Glabellar lines (China)

Oncology/ Endocrinology **Neurosciences**

Note: Regulatory decision dates based on current expected timelines for ongoing clinical programs;
HCC: Hepatocellular Carcinoma; NET: Neuroendocrine Tumors; PRF: Prolonged Release Formulation; PRRT: Peptide Receptor Radionuclide Therapy; RCC: Renal Cell Carcinoma

Because patients can’t wait !



IPSEN
Innovation for patient care

05 R&D roadmap

- Focus on key therapeutic areas – Oncology, Neurosciences, Rare diseases
- Manage R&D project portfolio rigourously, allocate resources optimally and accelerate targeted projects to deliver increased value
- Be a leading external innovation-sourcing organization and development powerhouse
- Leverage presence and collaborations in strategically located ecosystems
- Deliver at least one NME or meaningful indication/ registration every year
- Make a difference for our patients by providing the best therapeutic solutions

NME: New Molecular Entity

Q&A

06
Conclusion

David Meek
Chief Executive Officer

01 Ipsen roadmap

- Deliver double-digit growth and improving profitability
- Implement R&D transformation with focus on innovative and differentiated assets
- Bolster external sourcing model/ business development to build innovative Specialty Care pipeline
- Accelerate Consumer Healthcare business to sustainable and profitable growth
- Deliver superior value to patients and shareholders

MERCI

IPSEN
Innovation for patient care