

26 SEPTEMBER 2019

Biocartis Corporate presentation

ID
YLL
A



NOTICES AND WARNINGS

This presentation has been prepared by the management of Biocartis Group NV (the "Company"). It does not constitute or form part of, and should not be construed as, an offer, solicitation or invitation to subscribe for, underwrite or otherwise acquire, any securities of the Company or any member of its group nor should it or any part of it form the basis of, or be relied on in connection with, any contract to purchase or subscribe for any securities of the Company or any member of its group, nor shall it or any part of it form the basis of or be relied on in connection with any contract or commitment whatsoever. It is not a prospectus or offering memorandum.

The information included in this presentation has been provided to you solely for your information and background and is subject to updating, completion, revision and amendment and such information may change materially. No person is under any obligation to update or keep current the information contained in this presentation and any opinions expressed in relation thereto are subject to change without notice. No representation or warranty, express or implied, is made as to the fairness, accuracy, reasonableness or completeness of the information contained herein. Neither the Company nor any other person accepts any liability for any loss howsoever arising, directly or indirectly, from this presentation or its contents.

This presentation includes forward-looking statements that reflect the Company's intentions, beliefs or current expectations concerning, among other things, the Company's results, condition, performance, prospects, growth, strategies and the industry in which the Company operates. These forward-looking statements are subject to risks, uncertainties and assumptions and other factors that could cause the Company's actual results, condition, performance, prospects, growth or opportunities, as well as those of the markets it serves or intends to serve, to differ materially from those expressed in, or suggested by, these forward-looking statements. The Company cautions you that forward-looking statements are not guarantees of future performance and that its actual results and condition and the development of the industry in which the Company operates may differ materially from those made in or suggested by the forward-looking statements contained in this presentation. In addition, even if the Company's results, condition, and growth and the development of the industry in which the Company operates are consistent with the forward-looking statements contained in this presentation, those results or developments may not be indicative of results or developments in future periods. The Company and each of its directors, officers and employees expressly disclaim any obligation or undertaking to review, update or release any update of or revisions to any forward-looking statements in this presentation or any change in the Company's expectations or any change in events, conditions or circumstances on which these forward-looking statements are based, except as required by applicable law or regulation.

This document and any materials distributed in connection with this document are not directed to, or intended for distribution to or use by, any person or entity that is a citizen or resident or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would require any registration or licensing within such jurisdiction. The distribution of this document in certain jurisdictions may be restricted by law and persons into whose possession this document comes should inform themselves about, and observe any such restrictions.

The Company's securities have not been and will not be registered under the US Securities Act of 1933 (the "Securities Act") and may not be offered or sold in the United States absent registration under the Securities Act or exemption from the registration requirement thereof.

LEADER IN ONCOLOGY PRECISION DIAGNOSTICS

Differentiated technology

- Idylla™: first **fully automated** sample-to-result qPCR platform
- Superior and validated **performance** versus competition
- Enabling **global decentralization** of clinical molecular diagnostics (MDx)

Attractive market

- Global MDx market of USD 6.5bn; oncology fastest growing segment with **high double digit annual growth** rates
- Large, global initial **customer base** (i.e. pathology labs) with opportunity to expand (e.g. labs that want to step into MDx testing)
- Potential to add new **customer segments**

Focus on oncology

- Unique platform features bring strong **competitive advantage in oncology testing**
- Broad **test menu** (solid & liquid biopsies) currently focused on **targeted therapies** and **immunotherapy** and to move into **monitoring**
- Content partners such as Genomic Health to add high value genomic signatures to the menu
- Validation via **partnerships** with pharma (e.g. Amgen, Merck KGaA, AstraZeneca, Bristol-Myers Squibb, Kite)

Proven commercial strategy

- Installed base of to **1,129 Idylla™ instruments** as per 31 June 2019
- Commercial footprint in place that covers **all majority MDx markets worldwide**
- Continued **growth in existing markets** (Europe , US and RoW *), working towards launch in **China and Japan**

H1 2019 performance

- **+156** new Idylla™ instrument placements in H1 2019
- **1,000th** Idylla™ instrument placed in the US with the Diagnostic Medicine Institute at Geisinger
- Commercial volume of **72k** cartridges in H1 2019, representing a year-over-year increase of approx. **24%**
- Total operating income increased year-over-year with **36%** to **EUR 17.3m** driven by higher collaboration and product revenues

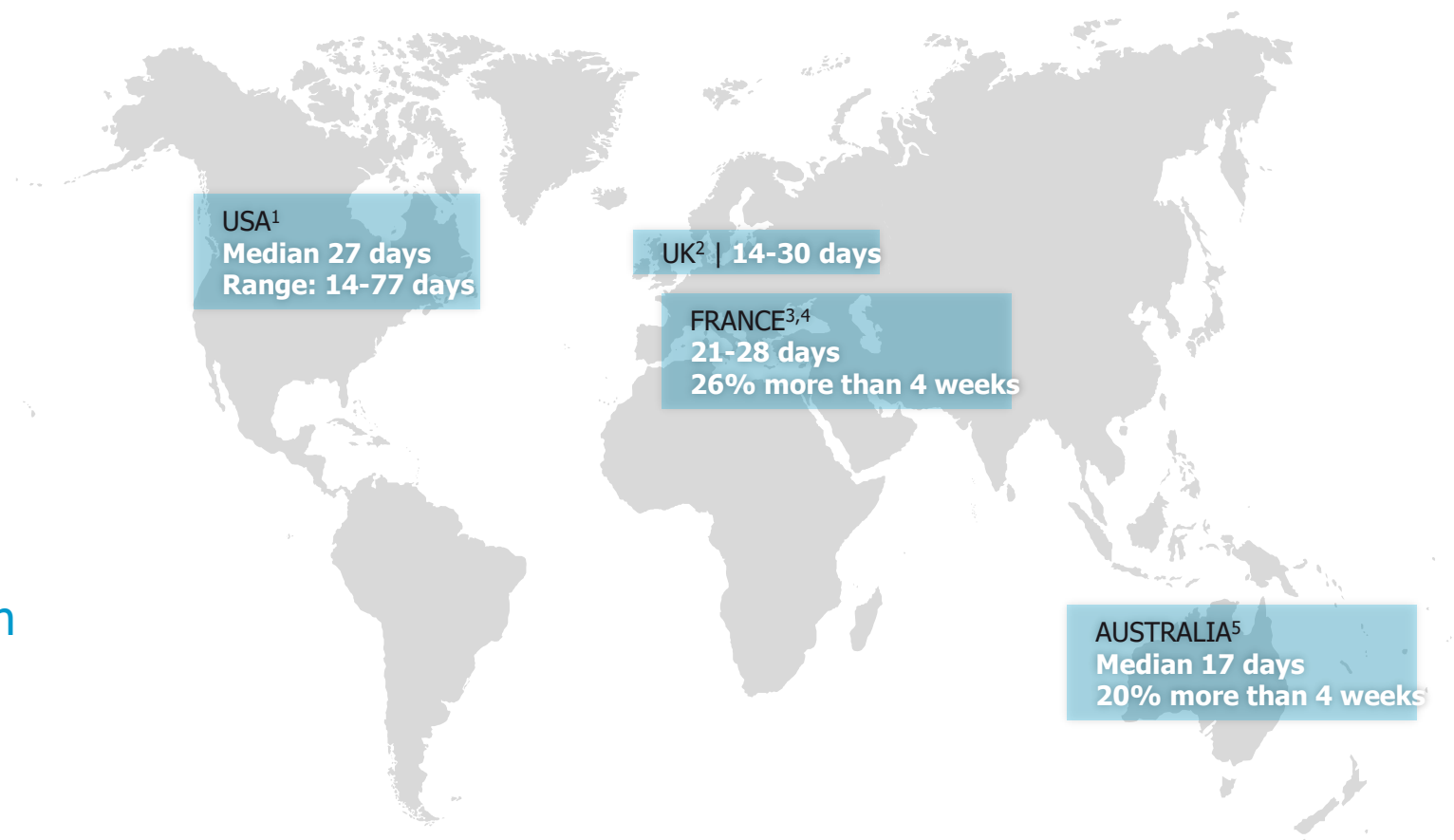
Positioned for further growth

- **Expansion into major additional markets:** US commercialization expansion ongoing, joint venture with Wondfo established for China and distribution agreement signed with Nichirei Bioscience
- **Menu expansion progressing:** CE-IVD launch of the **Idylla™ MSI Test** in Q1 2019 and expected expansion lung cancer menu in Q4 2019
- New **highly automated second cartridge manufacturing line** to support volume growth and cost effectiveness

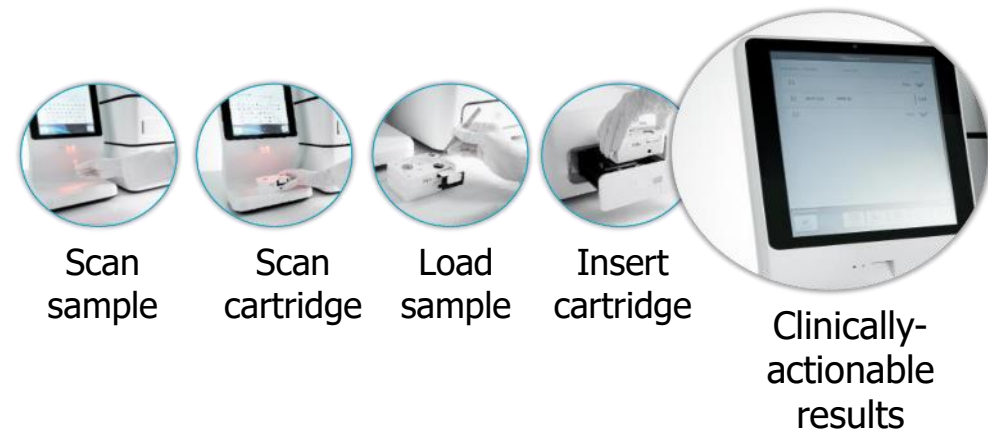
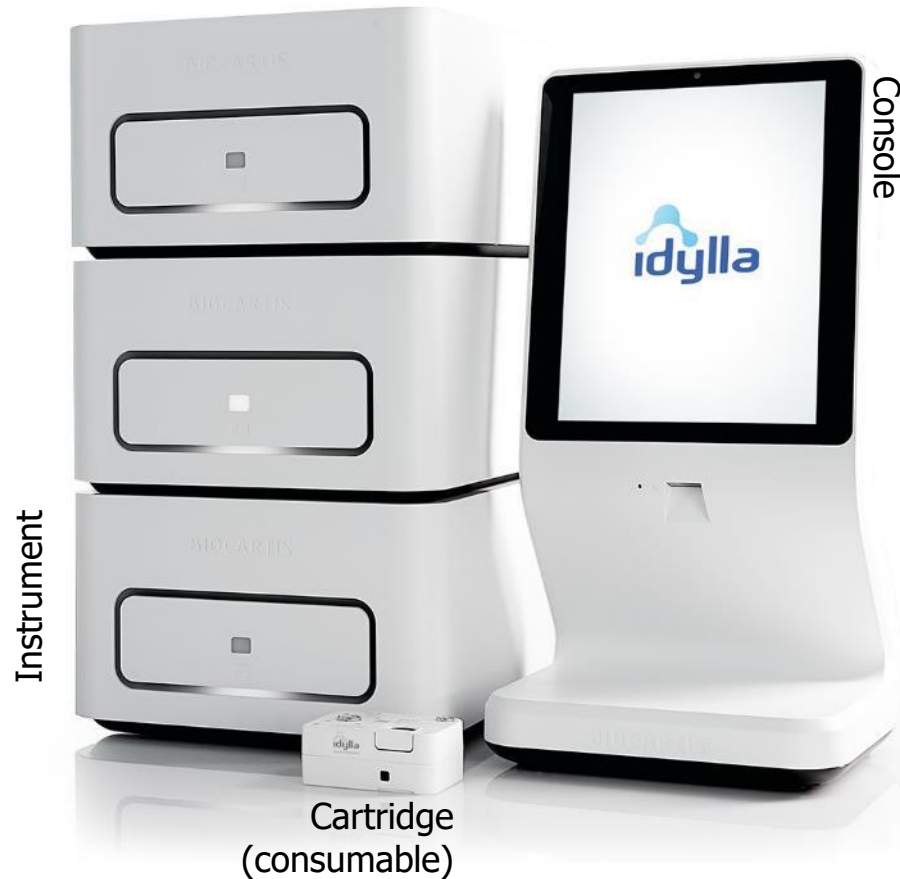
* RoW = Rest of the World. RoW is defined as the world excluding Europe, US, China and Japan

DIFFICULT ACCESS TO MOLECULAR DIAGNOSTICS INFORMATION

- In the US, **nearly 80%⁴** of cancer patients **do not have genetic mutation results** available at initial oncology consultation
- **Up to 25%** of patients **begin treatment** before receiving their results⁴







FULLY AUTOMATED MOLECULAR TESTING WITH IDYLLA™



Superior sensitivity and ease-of-use, combined with sample-to-result turnaround time of 90 to 150* minutes

* Based on turnaround times of current on-market oncology tests

ENABLING DECENTRALIZED TESTING

	Idylla™ workflow	Traditional workflow*
Instruments needed		
Lab consumables needed		
Lab infrastructure (# rooms)	1	3
Workflow	<ul style="list-style-type: none"> Fully automated ('sample-to-result') and on demand 	<ul style="list-style-type: none"> Manual and batch-based testing, 1/week or biweekly
Turnaround time	<ul style="list-style-type: none"> < 2.5hrs turnaround time per test In 1-2 days to treatment initiation*** 	<ul style="list-style-type: none"> 1-4 days turnaround time per test On average 18 days** to treatment initiation***

Traditional workflow results in:

- Centralized testing (many labs send out samples) by specialized labs with experienced lab technicians
- Poor reproducibility of results (i.e. human errors)
- Long turnaround time (~ weeks)

Idylla™ enables:

- Decentralized testing by all labs (no geographical differences in quality)
- 'First-time-right' results
- Short turnaround time (~ 'same-day-result')

COMPARATIVE STUDIES CONFIRM SUPERIOR PERFORMANCE

EXAMPLE STUDY ORGANIZED BY ASTRAZENECA

Background

- Comparison of 13 different KRAS mutation detecting technologies:

6x NGS	
3x qPCR	
2x mass spec.	
1x ddPCR	
1x Sanger sequencing	

- Focused on detection of KRAS mutations in lung cancer based on blinded samples

Conclusions

Sensitivity

Technology	Overall sensitivity
Idylla™ KRAS	96%
Other qPCR (cobas/therascreen)	46-52%
Mass-spectrometry	58-92%
NGS	48-100%
ddPCR	52-60%

Ease-of-use

TaT**

Highest score for Idylla™ KRAS technology:

- Lowest number of manual handling steps in sample preparation (1 to 2 steps versus 3 to > 20 steps)
- Requires lowest level of expertise (1 versus 2-4 for others*)
- Highest score for Idylla™ KRAS technology on total turnaround time (2 to 4 hours versus 1 day to 3 weeks)

Source: Sherwood JL, Brown H, Rettino A, et al., "Key differences between 13 KRAS mutation detection technologies and their relevance for clinical practice". ESMO Open 2017;2:e000235. doi:10.1136/esmoopen-2017-000235.
 NGS technologies included two technologies by Thermo Fisher Scientific. Mass spectrometry technologies included two technologies from Agena Bioscience

* One being the lowest level of expertise and four the highest
 ** TaT = total turnaround time



~30 IDYLLA™ PERFORMANCE STUDIES PUBLISHED IN H1 2019

Publications at ASCO (30 May-4 June 2019)

- **Multi-centered study¹** on the performance of the Idylla™ MSI Test (CE IVD) in **comparison with the Promega MSI test** ('Promega MSI Test')
- Selected for **publication** at the renowned ASCO (American Society of Clinical Oncology) Annual Meeting
- Study showed **high performance and a low invalid rate** of the Idylla™ MSI Test
- Demonstrated the possibility of rapid, fully automated MSI testing with Idylla™

Publications at USCAP² (16-21 March 2019)



Memorial Sloan Kettering
Cancer Center

- A hairy cell leukemia focused study³ using different sample types including stained smear slides, blood & bone marrow without pre-extraction



- A colorectal cancer focused prospective study⁴ and a melanoma focused study⁵ with comparison to next-generation sequencing (NGS)



- A colorectal cancer focused study⁶ with comparison to PCR & IHC for Microsatellite Instability Status, and a multiple cancers focused study⁷ using challenging FFPE samples not suitable for conventional sanger & NGS testing



- A melanoma focused study⁸ using pigmented melanomas

¹ Pauwels P. et al, 'The Idylla™ MSI Test multi-center concordance study: microsatellite instability detection in colorectal cancer samples', first published at ASCO Annual Meeting of the American Society of Clinical Oncology, 30 May – 4 June 2019, Chicago (IL), US

² The USCAP (United States and Canadian Academy of Pathology) Annual Meeting took place in Maryland, US, from 16-21 March 2019. All abstracts can be found on <https://www.xcdsystem.com/uscap/program/2019/index.cfm?pgid=131&qfixed=1&sessiontype=Poster%20Presentation>. All Idylla™ assays sold in the US are for Research Use Only, not for use in diagnostic procedures

³ 'Sensitive and Ultra-Rapid BRAF V600E Mutation Assessment in Hairy Cell Leukemia From Stained Smear Slides, Blood and Bone Marrow Without Pre-Extraction', Memorial Sloan Kettering Cancer Center,

⁴ 'Evaluation of a fully automated system for use in somatic mutation testing in colorectal cancer: A prospective study with comparison to next-generation sequencing', Dartmouth Hitchcock Medical Center

⁵ 'Rapid Detection of BRAF and NRAS Mutations in Melanoma Using a Fully Automated System: A Comparison with Next Generation Sequencing', Dartmouth Hitchcock Medical Center

⁶ 'Evaluation of a fully automated system for use in somatic mutation testing in colorectal cancer: A prospective study with comparison to next-generation sequencing', Medical College of Wisconsin

⁷ 'Rapid Detection of BRAF and NRAS Mutations in Melanoma Using a Fully Automated System: A Comparison with Next Generation Sequencing', Medical College of Wisconsin

⁸ 'Fully automated biomarker analysis on samples challenging for traditional molecular methods', Wake Forest Baptist Health

UNIQUELY POSITIONED IN ATTRACTIVE ONCOLOGY MDX MARKET

Fast growing market

ONCO MDX

- Represents 19% of the USD 6.5bn total MDx market in 2016¹
- Fastest growing segment in MDx, expected to grow 26% per annum (doubling of market) to 2020²

KEY GROWTH DRIVERS

- Global incidence ~18.1bn; growing at ~2.5% per annum³
- Increased need for MDx testing:
 - Broader availability of targeted therapies
 - Significant clinical pipeline targeted therapies: in 2015, >800 cancer treatments were in development in the US⁴, ~70% has potential to be personalized medicines⁵
 - Addition of new application areas: immuno-oncology, liquid biopsy testing, etc.
- Growth of decentralized market (i.e. under-penetrated customer potential)

Idylla™ unique selling points



- 1 Ability to combine advantages of point-of-care testing with performance of lab reference testing: enabling MDx in virtually any lab setting
- 2 Reduction of time-to-result from weeks to hours
- 3 Sample-to-result (i.e. full automation) capabilities for:
 - Solid biopsies: FFPE^{6*}, FNA^{7^}, fresh samples[^]
 - Liquid biopsies: Plasma^{*}, whole blood[^], urine[^]

MARKET TRENDS DRIVE ONCOLOGY MENU STRATEGY

Targeted therapies



- Therapy selection driven by **specific cancer mutations**
- **Significant pipeline** of new targeted therapies across cancer types
- Examples
 - Zelboraf^{®1} (BRAF)
 - Tagrisso^{®2} (EGFR)
 - Erbitux^{®3} (RAS)
 - Vectibix^{®4} (RAS)

Pan-cancer therapies



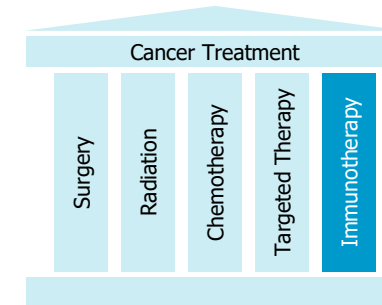
- Therapy selection driven by **genetics rather than location** of the tumor
- Allows therapy use across **multiple cancer types**
- Positive impact on underlying **test volumes**
- Examples
 - Vitrakvi^{®5}
 - Keytruda^{®6}

Gene signatures



- MDx tests that target applications **beyond therapy selection**, e.g.:
 - Cancer risk
 - Prognosis
- Often **high value once validated** and clinical value demonstrated
 - Critical information for medical decision-making

Immuno-oncology



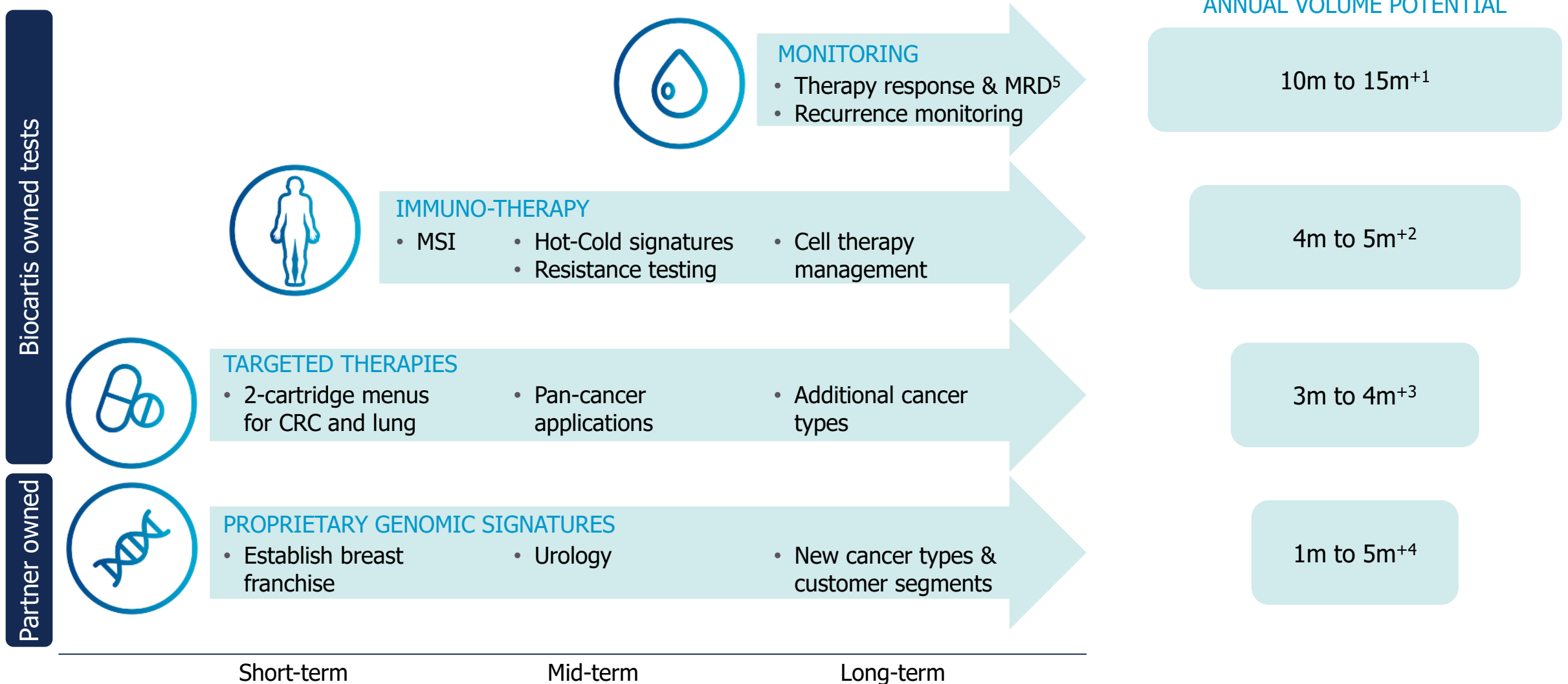
- **'Fifth pillar'** of cancer treatment
- Consists of **several therapeutic classes**, e.g.:
 - Immune checkpoint inhibitors
 - Cell and viral therapies
 - Vaccines
- **High unmet need** for underlying clinical testing

Liquid biopsy



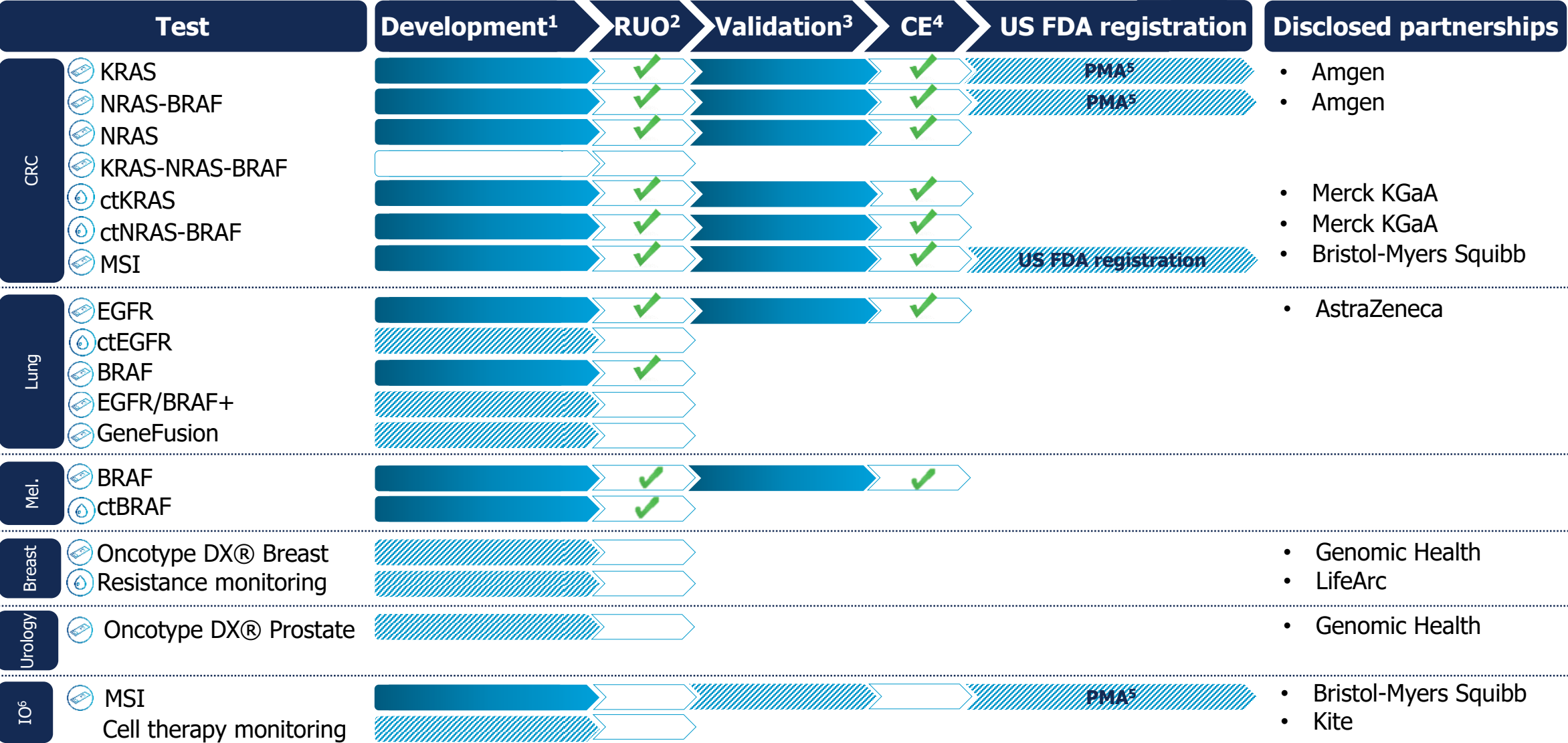
- Assess tumor information via **liquid samples**
- **Clinical value** increasingly demonstrated
- Front-runner applications:
 - Therapy selection
 - On-therapy monitoring
 - Post-treatment Minimal Residual Disease ('MRD')

IDYLLA™ ADDRESSABLE MARKET POTENTIAL



+ Depicts annual long term addressable Idylla™ cartridge volume potential. Based on management estimates. Focused on Europe, US and Japan (excluding China and RoW). For indicative purposes only. 1. Based on incidence / prevalence, potential eligibility (e.g., according to tumor stage and treatment) and # tests / patient. 2. Based on incidence and current / potential guideline testing eligibility for cancer types where immune checkpoint inhibitors and cell therapies are most relevant. 3. Based on incidence and current / anticipated cancer guidelines for CRC, lung, and skin cancer. 4. Based on current partner content collaborations and addition of new content that could benefit from Idylla™ dependent on partnerships. 5. MRD = Minimal Residual Disease

RAPIDLY EXPANDING IDYLLA™ TEST MENU



1. Generally includes analytical validation. 2. Research Use Only 3. Clinical validation. 4. CE-IVD. 5. Premarket approval process with US FDA. 6. IO = Immuno-oncology. Overview is subject to change in amongst others prioritization of test development by Biocartis and/or partners driven by commercial, partnering & operational considerations.

UNDERPENETRATED CUSTOMER BASE

Potential pathology customer base

- Initial Idylla™ customer base
- Around 16,000 pathology laboratories worldwide¹
- Significant number of hospitals not performing MDx today, table below shows situation in US²:

Hospital segment	Number	Performing MDx (total)	%
Small	3,816	382	10%
Medium	988	632	64%
Large	420	353	84%

Unlocking Idylla™ customer base potential

Sales approach pathology labs

- Initial focus on labs offering MDx testing (= existing market)
- Second phase focused on targeting labs that want to step into MDx testing (= new market)

Additional customer bases

- Ongoing menu expansion and content partnerships could expand Idylla™ customer base into oncologists, urologists, dermatologists, etc.

LAUNCH IDYLLA™ CE-IVD MSI TEST

Background MSI

- MSI is the abbreviation of Micro Satellite Instability
- MSI is the result of inactivation of the body's so-called DNA mismatch repair (MMR) system. Consequently, errors that normally spontaneously occur during DNA replication are no longer corrected, contributing to tumor growth and evolution
- MSI testing is included in [international guidelines](#) for colorectal cancer, but is present in several other tumor types, such as gastric & endometrial cancer
- MSI is also an independent factor that may predict a patient's response to certain [immunotherapies](#)



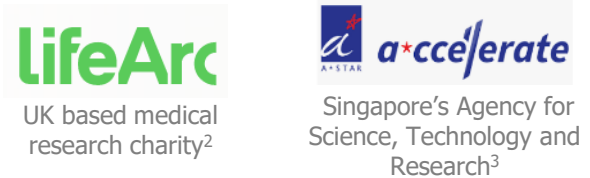


The Idylla™ MSI Test¹

- Includes [novel set of 7 MSI biomarkers](#)⁵, exclusively licensed to Biocartis² in 2013
- [Unique characteristics](#):
 - Fully automated
 - Fast and accurate information on MSI status in colorectal cancer directly from FFPE⁴ tissue without the need for matched normal samples³
 - High concordance (> 97%) and lower failure rates compared to standard methods³
 - No need for paired normal tissue testing
 - Unbiased results reporting for a variety of cancer types independent of ethnicities³
- Expected to overcome drawbacks of conventional MSI testing, making MSI testing available to a [larger patient population](#)

1 The Idylla™ MSI Test was launched as a CE-IVD marked test on 28 February 2019. 2 From VIB, the life sciences research institute in Flanders (Belgium), and originated from the research of the group of Prof. Diether Lambrechts (VIB-KU Leuven, Belgium). 3 Clinical Performance Study showed 99,7% concordance for MSI testing vs Promega (unpublished data); De Craene B. et al. Annals of Oncology (2017) 28 (suppl_5): v209-v268; De Craene et al. J Clin Oncol 36, 2018 (suppl; abstr e15639)>. 4 FFPE = formalin fixed, paraffin embedded. 5 Consisting of short homopolymers located in the ACVR2A, BTBD7, DDO1, MRE11, RYR3, SEC31A and SULF2 genes.

ACCELERATED MENU EXPANSION WITH PARTNERS

	Pharma & biotech companies	Content partners	Development partners
Focus	<ul style="list-style-type: none"> (Joint) development of CDx¹ on Idylla™ platform 	<ul style="list-style-type: none"> Porting of proprietary biomarker panels developed and validated by third parties on Idylla™ platform 	<ul style="list-style-type: none"> Development Biocartis Idylla™ assays in partnership with research institutions
Benefit Biocartis	<ul style="list-style-type: none"> Faster commercial adoption, higher market shares 	<ul style="list-style-type: none"> Proprietary 3rd party content on Idylla™ platform 	<ul style="list-style-type: none"> Lowered menu development costs
Benefit partners	<ul style="list-style-type: none"> Better and faster selection of eligible patients for targeted therapies given faster TaT & high sensitivity: <ul style="list-style-type: none"> Fast TaT: reduces competition with therapies not requiring a biomarker High sensitivity: more patients detected with relevant biomarkers 	<ul style="list-style-type: none"> Accelerated global roll-out of content No platform education needed: focus on content education Realization of cost efficiencies 	<ul style="list-style-type: none"> Contribution to medical innovation Knowledge sharing and building
Partners			

1. CDx = Companion Diagnostics

2. On 15 June 2017, MRC Technology changed its name in LifeArc. LifeArc has been involved in helping deliver a number of therapies including Keytruda (pembrolizumab, marketed by MSD) which is an important immunotherapy treatment for various cancers

3. Partnership is with ETPL, the commercialization arm of A*STAR

STRATEGIC COLLABORATION WITH



Background collaboration

- Focused on [exclusive test development](#) of proprietary Genomic Health tests on the Idylla™ platform
- Aimed at [accelerating](#) adoption and market access around the world of Genomic Health's tests
- First test to be developed on Idylla™ is the [Oncotype DX Breast Recurrence Score® test](#), second test is the [Oncotype DX Genomic Prostate Score® Test](#)

Oncotype DX Breast Recurrence Score® Test

- Examines the activity of [21 genes](#) in a patient's breast tumor tissue to provide personalized information for tailoring treatment based on the biology of their individual disease.
- Only test proven to [predict chemotherapy benefit](#)
- Included in [all major cancer guidelines](#) worldwide and is now considered standard of care for early-stage breast cancer.

Background Genomic Health

- Leading provider of genomic-based Dx cancer tests, [revenues of USD 394 m](#) in 2018. Based in California (US), NASDAQ (GHDX) listed, market cap approx. USD [2.97bn](#)
- [Exact Sciences Corp.](#) (NASDAQ: EXAS) & Genomic Health announced 29 July 2019 to have entered into a definitive agreement under which Exact Sciences will combine with Genomic Health
- [On-market tests](#) for [breast](#), [prostate](#) and [colon](#) cancer, currently offered through own service laboratories

Oncotype DX Genomic Prostate Score® Test

- Examines the activity of [17 genes](#) in a patient's prostate biopsy sample to provide information on the aggressiveness of their individual disease
- Predicts risk of metastasis and helps to make better informed & more personalized treatment decisions
- Has been validated in [> 4,500 patients](#), which is described in [18 publications](#)

IMMUNO-ONCOLOGY COLLABORATION WITH Bristol-Myers Squibb

Background collaboration

- Collaboration focused on **MSI testing** in connection with immuno-oncology therapies
- Allows for **joint developments** and registrations of the **Idylla™ MSI test** for use in a variety of indications, commercial settings and geographies
- Initial focus under agreement is expected to be registration in the **US** of Idylla™ MSI test as a **companion diagnostic test**
- Bristol-Myers Squibb Company (NYSE: BMY) is a global biopharmaceutical company that amongst others markets **OPDIVO®**
- Financial details are not disclosed

Background OPDIVO®



- OPDIVO® (nivolumab) plus low-dose Yervoy+ (ipilimumab) is the **first immuno-oncology combination treatment** approved by the US FDA for **MSI-High** or mismatch repair deficient (dMMR) metastatic colorectal cancer (**mCRC**) that has progressed following treatment with certain chemotherapies*
- OPDIVO® generated USD **4.9bn** of **global sales** in 2017~

+ 3 mg/kg Opdivo plus 1 mg/kg Yervoy.

* Treatment with fluoropyrimidine, oxaliplatin and irinotecan. Note that OPDIVO® is also approved in the US as a single agent, for the treatment of adult and pediatric patients 12 years and older with microsatellite instability-high (MSI-H) or mismatch repair deficient (dMMR) metastatic colorectal cancer (CRC) that has progressed following treatment with a fluoropyrimidine, oxaliplatin, and irinotecan.

~ Source: 2017 annual report BMS.

DEVELOPMENT & COMMERCIALIZATION AGREEMENT WITH



Background Kite

- Biopharmaceutical company that was acquired by [Gilead Sciences](#) (Nasdaq: GILD) for USD 11.9bn¹ in 2017
- Active in [innovative cancer immunotherapies](#): harnessing power of a patient's own immune system to effectively target & attack cancer cells
- Has [industry-leading pipeline](#) of CAR² and TCR² product candidates to address hematological (blood-based) & solid cancers¹
- Kite's [Yescarta™](#) (Axicabtagene Ciloleucel) was the first CAR-T therapy approved by US FDA for treatment of adult patients with relapsed or refractory large B-cell lymphoma³

Details collaboration

- [Master development and commercialization agreement](#) aimed at development of molecular-based assays on the Idylla™ platform that are supportive to Kite's therapies
- Speed & ease-of-use of Idylla™ could enable regular, [rapid monitoring of patients under cell therapies](#) in a near patient setting, which is expected to help optimize patient management
- Cell & checkpoint blockade therapies are expected to cover a [wide range of complementary indications](#) in solid & hematological tumors, and may be used depending on the tumor's immune activity status.
- This partnership is Biocartis' [2nd immunotherapy assay development agreement](#)

1 Source: <https://www.kitepharma.com/>, last consulted on 29 May 2019

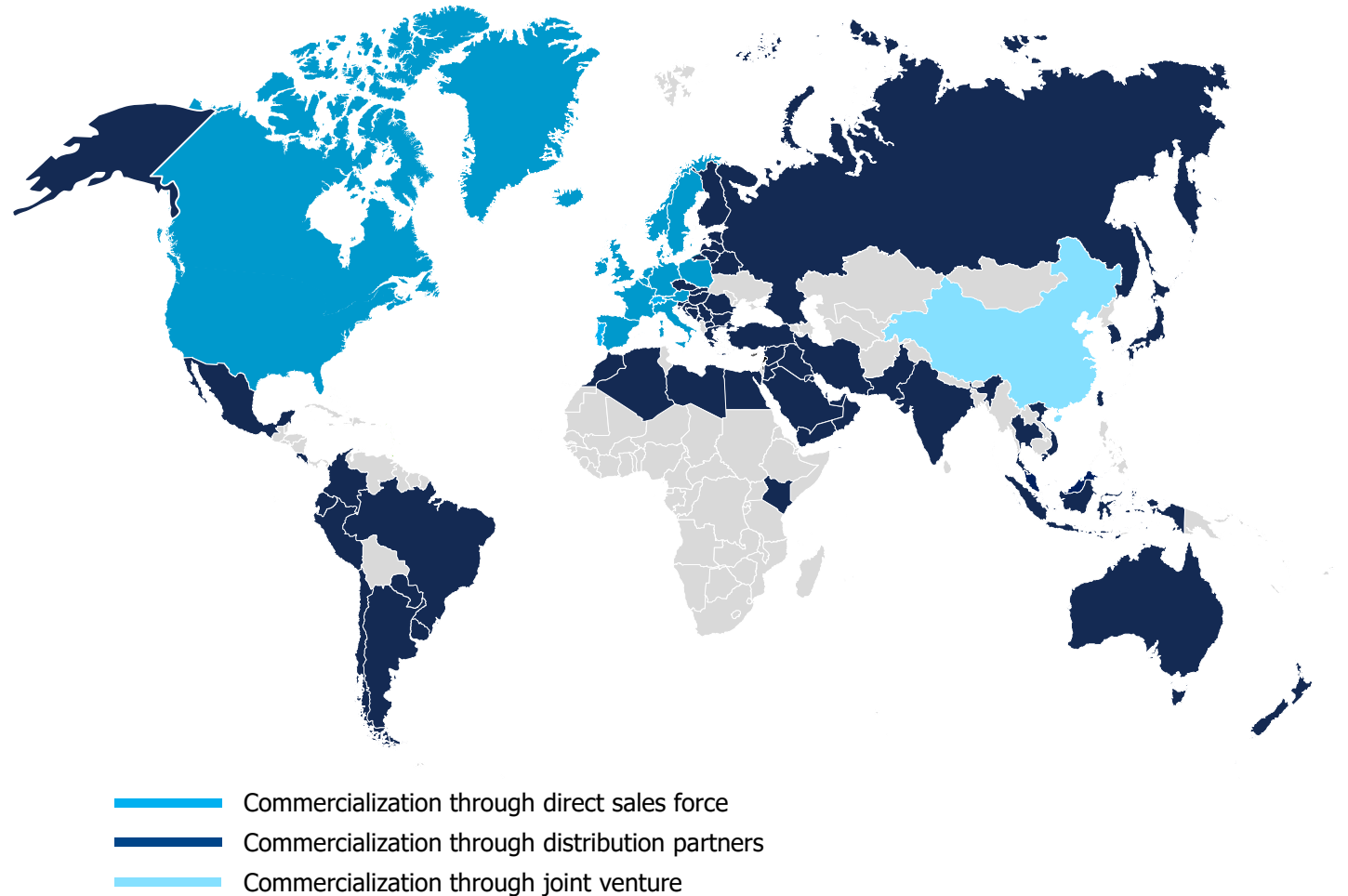
2 Chimeric Antigen Receptor (CAR) and T cell receptor (TCR)

3 After two or more lines of systemic therapy. Source: <https://www.kitepharma.com/>, last consulted on 29 May 2019

WORLDWIDE GLOBAL COMMERCIAL FOOTPRINT¹

Over 70 countries covered through four sales channels:

- 1 Direct sales force covering Western European countries, US and Canada
- 2 Distributor contracts in place covering ~ 65 countries. Distribution agreement with Nichirei Bioscience for Japanese market
- 3 Joint venture in China with Wondfo
- 4 Pharma collaborations (e.g. Merck KGaA (Darmstadt, Germany), Amgen, AstraZeneca, BMS and Kite) and content partnerships (e.g. Genomic Health, Immunexpress)



GO-TO MARKET STRATEGIES IN PLACE FOR CHINA & JAPAN

Chinese go-to market strategy



- Joint venture established with Wondfo for Chinese market
- Chinese MDx market **one of fastest growing** in the world²
- Wondfo (SHE:300482) is a **fast growing diagnostics leader** in China with focus on POC¹ testing, listed on Shenzhen Exchange (current market capitalization of USD ~1.3bn) with revenues in 2017 of ~ USD 160m
- Joint venture structure: **50%-50%** ownership. Capital commitment of EUR 14m, split between parties and over several tranches
- Focus on local **manufacturing, commercialization & registration** with Chinese Regulatory Authorities of existing Idylla™ oncology tests

Japanese go-to market strategy



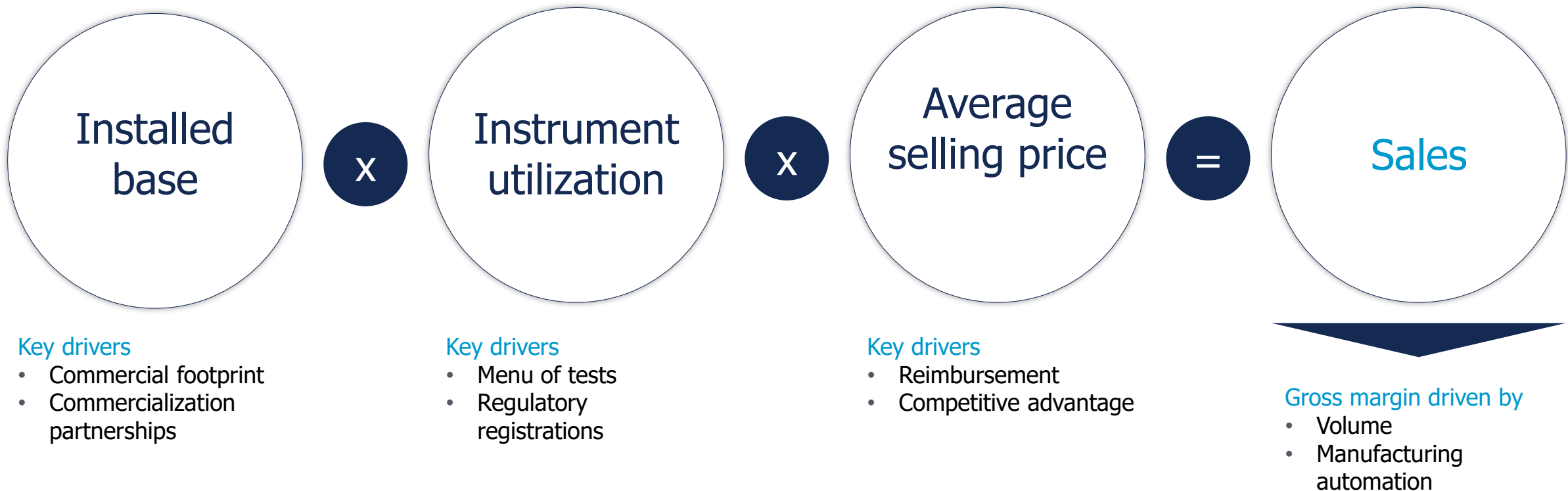
- **Commercialization agreement** with **Nichirei Bioscience** for Japanese market
- Japanese MDx market is **one of the largest** in the world, representing around 10% of global MDx market¹
- Part of **Nichirei Corporation** (TYO: 2871), a holding company with an annual turnover of ~¥ 550 billion²
- Nichirei Bioscience to seek **regulatory approval** of Idylla™ platform and its oncology tests with Japanese Ministry of Health, Labor and Welfare
- Upon successful registration, Nichirei Bioscience's sales force will distribute the Idylla™ platform across its commercial network of approx. **2,000 pathology laboratories** in Japan

NEW HIGH VOLUME CARTRIDGE MANUFACTURING LINE



- Located in Mechelen (Belgium), providing an additional **annual capacity of over 1,000,000 cartridges**
- **Fully automated** assembly workstations (versus a semi-automated on first line with an annual capacity of over 200k cartridges)
- Plastic parts manufactured with new **multi-cavity moulds** (versus single cavity on first line)
- To support **volume growth** and **cost effectiveness**

PLATFORM AND CONSUMABLE DRIVEN BUSINESS MODEL



KEY MESSAGES H1 2019

Commercialization

Installed base

+ 156 instruments added

Cartridge volume

72k cartridges, +24% year-over-year growth. Slower pick-up in US cartridge volumes

Commercial footprint

Japanese commercialization agreement signed. Termination US distribution agreement Fisher Healthcare.

Menu and partnerships

Colorectal cancer (CRC) menu

Successful CE-IVD launch MSI Test

Immuno-oncology (IO)

Two IO assay development projects initiated

Partnership business

Partnerships signed with BMS, Kite and Covance

Financials

Total operating income

+36% year-over-year to EUR 17.3m

Funding events

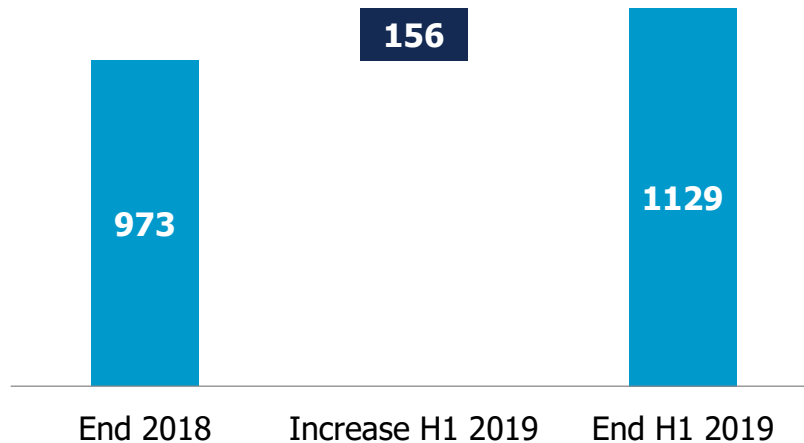
EUR 55.5m equity raise and EUR 150m convertible bond issue

Cash position

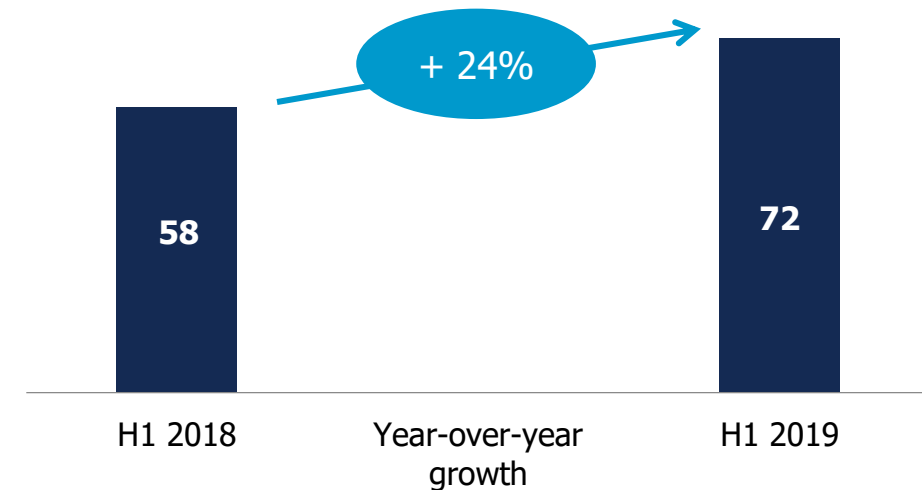
Cash and cash equivalents of EUR 209m end H1 2019

CONTINUED INSTALLED BASE & CARTRIDGE VOLUME GROWTH

Installed base (in # instruments)



Commercial cartridge volume (x 1,000)



- + 156 instruments added in H1 2019
- 1,000th Idylla™ instrument added to the installed base, placed in US with Diagnostic Medicine Institute at Geisinger
- Number of realized new placements in Europe and RoW¹ geographies exceeded expectations

- Commercial cartridge volume increased to 72k, a year-over-year increase of 24%
- Realized cartridge volume growth in H1 2019 was below expectations driven by a slower pick-up of US RUO² cartridge volumes

¹ RoW = Rest of the World. RoW is defined as the world excluding European direct markets, US, China and Japan
² All Idylla™ assays sold in the US are for Research Use Only, not for use in diagnostic procedures

SOLID CONTINUED GROWTH IN EUROPE & ROW¹ MARKETS

Europe

- Continued growth in cartridge volumes and installed base growth **exceeded expectations**
- Driven by **increased usage of Idylla™ in first line testing** in amongst others UK, France and Italy, as well as strong overall contribution from pharma collaborations

RoW¹

- Solid performance with new instrument placements **exceeding expectations** and significant continued cartridge volume growth
- Driven by **strong customer base expansion** in Canada, Asia, Eastern Europe and North Africa and **new market authorizations** for products in amongst others Colombia and Thailand



ACTIONS TAKEN TO BOOST US COMMERCIALIZATION

H1 2019 update

- Further expansion of the US customer base with **new high profile customers**
- Cartridge volume pick-up below expectations due to **more gradual increase of cartridge orders** after Idylla™ instrument implementation
- Variety of **reasons** driving delayed pick-up, including:
 - Education on amended standard operational procedures
 - Gradual switch from current testing methodologies to Idylla™

US outlook

- On 5 September 2019, Biocartis and Fisher Healthcare announced **termination of US distribution agreement**
- Going forward, Biocartis' **US direct sales team** will drive US commercialization
- A number of US customers is currently **completing Idylla™ implementation** which is expected to drive volume ramp-up in H2 2019
- Accelerate **growth of US customer base** expected once:
 - **Transition** from Fisher Healthcare is completed
 - **Expansion** of Biocartis US direct sales team is further progressed

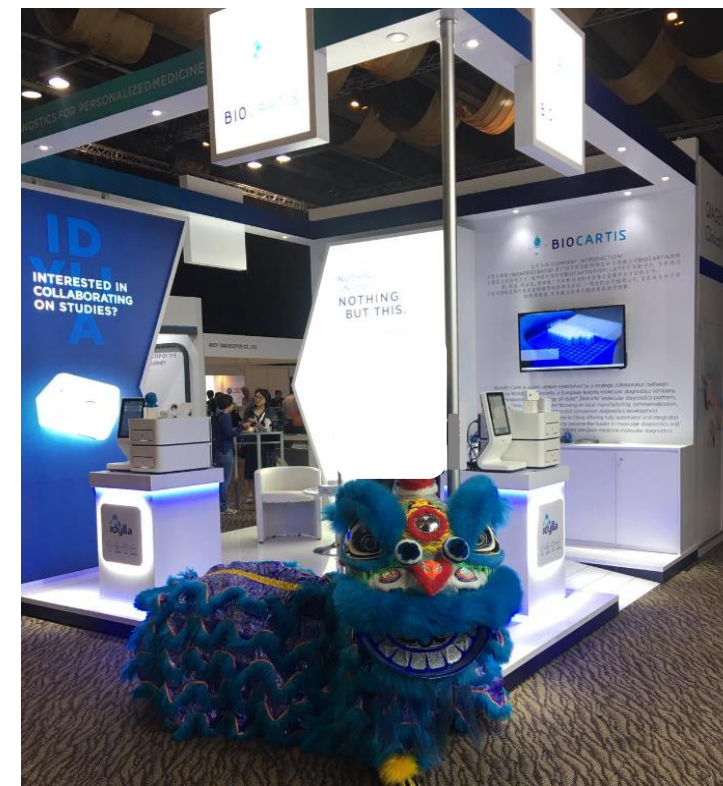
CHINA AND JAPAN COMMERCIALIZATION FURTHER PROGRESSED

China

- Joint venture established with [Wondfo](#)¹, a fast growing diagnostics leader in China²
- Completion of [closing of joint venture](#) in Q1 2019 resulted in [first capital contributions](#) and [license payment](#) to Biocartis

Japan

- Commercialization agreement signed with [Nichirei Bioscience](#)³ for Japanese market⁴ in January 2019
- Partners [further progressed registration preparations](#) for the Idylla™ instrumentation and assays in H1 2019



¹ Wondfo is listed on Shenzhen Exchange (current market capitalization of USD ~1.3bn) with revenues in 2017 of ~ USD 160m

² China is one of fastest growing MDx markets in the world. Source: DataMintelligence, "Global Molecular Diagnostics Market 2018-2025"

³ Part of Nichirei Corporation (TYO: 2871), a holding company with an annual turnover of ~¥ 550 billion (source: Nichirei Bioscience website and company information). The agreement was announced on 7 January 2019

⁴ Japanese MDx market is one of the largest MDx markets in the world, representing ~ 10% of the global MDx market. Source: DataMintelligence, "Global Molecular Diagnostics Market 2018-2025"

TOTAL OPERATING INCOME INCREASED TO EUR 17.3M

Breakdown total operating income

In EUR 1,000	H1 2019	H1 2018
Product sales revenue	9,980	8,555
Collaboration revenue	6,816	3,535
Service revenue	351	251
Total revenue	17,147	12,341
Grants and other income	151	400
Total operating income	17,298	12,741

Additional details (in EUR 1,000)

Product sales revenue	H1 2019	H1 2018
Idylla™ system sales	2,499	1,952
Idylla™ cartridge sales	7,481	6,603
Product sales revenue	9,980	8,555

Collaboration revenue	H1 2019	H1 2018
R&D services	4,350	2,626
License fees	2,467	75
Milestones	0	833
Collaboration revenue	6,816	3,535

OPERATING RESULT OF EUR -29.7M

Condensed income statement

In EUR 1,000	H1 2019	H1 2018
Total operating income	17,298	12,741
Cost of sales	(8,742)	(6,890)
R&D expenses	(20,031)	(16,029)
S&M expenses	(8,811)	(7,152)
G&A expenses	(6,399)	(3,809)
Total operating expenses	(43,983)	(33,880)
Operating result	(26,685)	(21,139)
Net financial result	(2,822)	(691)
Share in result JV	-181	0
Income taxes	18	70
Net result	(29,670)	(21,760)

Comments

- **OPEX** increased 30% y-o-y to EUR 44.0m in H1 2019
- Increase in OPEX driven by:
 - Increased **COGS** due to higher commercial product volumes
 - Increased **R&D** expenses due to addition of menu partnerships
 - Increased **S&M** expenses due to expansion of US sales force
 - Increased **G&A** expenses due to overall organizational growth & general cost allocation that is shifting more towards a commercial stage organizational structure
- **Net financial result** increased to EUR 2.8m of which:
 - EUR 1.1 m relates to accrued interest of the convertible bonds
 - EUR 1.0m relates to interest and repayment of the Company's subordinated loan

RECORD CASH POSITION OF EUR 209M

Condensed cash flow statement

In EUR 1,000	H1 2019	H1 2018
Result for the period	(29,670)	(21,760)
Depreciation and amortization	3,713	2,144
Impairment losses	202	0
Working capital changes	(4,568)	(1,665)
Taxes & interests paid	(1,842)	(110)
CF operating activities	(28,357)	(20,335)
CF investing activities	(5,267)	(2,301)
CF financing activities	179,465	1,251
Total net cash flow ¹	145,841	(21,385)
Cash and cash equivalents ²	209,200	91,269
Financial debt	166,731	38,145

1. Excludes effects of exchange rate changes on the balance of cash held in foreign currencies

2. Including EUR 1.2 million restricted cash related to KBC Lease financing

Remarks

- **Cash burn from operating activities** slightly higher as result of:
 - A higher operating loss for the period
 - An increase in investments in working capital
 - Higher interest and other financial expenses
- **Cash flow from investing activities**
 - Increase driven by initial capital contribution made to China joint venture
 - Includes capitalized Idylla™ systems
- **Cash flow from financing activities** included:
 - EUR 55.5m capital raise in January 2019
 - EUR 150m convertible bond issue in May 2019
 - EUR 19.4m repayments of borrowings (predominantly the Company's subordinated loan)
- **Net cash flow** of EUR 145.8m, resulting in a **cash position** of **EUR 209m** as per end of June 2019

STRONG FINANCIAL POSITION

EUR 55.5m capital raise - January 2019

- Gross proceeds of **EUR 55.5m** by means of a private placement via an accelerated bookbuild offering
- Participation from **high quality institutional investors**, both existing and new international investors, from both Europe and the US
- New shares represent approx. **9.73%** of the Company's share capital immediately prior to the capital raise
- One of the first equity capital markets transaction of the European Life Sciences and Healthcare industry in 2019

EUR 150m convertible bond issue - May 2019

- EUR 150 million senior **unsecured convertible bonds** due 9 May 2024
- Participation from a renowned group of **international** and **local institutional investors**
- Bonds bear a **coupon of 4.00%** per annum and can be converted into shares at an **initial conversion price of ~EUR 12.90** (representing a 25% conversion premium*)
- Application will be made to list the bonds on the regulated market of Euronext Brussels by no later than 1 December 2019

* Above the reference price of EUR 10.3130

UPDATED GUIDANCE FULL YEAR 2019



Guidance for full year installed base growth is now set in the range of **325-350** new Idylla™ instrument placements







Guidance for full year commercial Idylla™ cartridge volume growth is decreased and now set in the range of **30% - 35%**



Guidance for cash position now set in the range of **EUR 170m-175m** by year-end

SHORT TERM MENU OUTLOOK (SELECTION)

Area	Test	Timing
	<ul style="list-style-type: none"> • Launch Idylla™ ctEGFR Assay (RUO²) • Launch Idylla™ GeneFusion Panel 	<ul style="list-style-type: none"> • Q4 2019 • 2020
	<ul style="list-style-type: none"> • CE-marking Idylla™ MSI Assay • US FDA submission Idylla™ MSI Test • US FDA submission Idylla™ RAS PMA¹ documentation 	<ul style="list-style-type: none"> • Q1 2019  • 2020 • 2020
	<ul style="list-style-type: none"> • Placement of Idylla™ instruments at European sites for the clinical validation studies of the Idylla™ Oncotype DXi IVD Breast Recurrence Score™ test in H2 2019 	<ul style="list-style-type: none"> • H2 2019

¹ PMA = Pre-Market Approval

² RUO = Research Use Only, not for use in diagnostic procedures

FINANCIAL CALENDAR

- | | |
|----------------------------------|-------------------|
| • Special Shareholders Meeting | 27 September 2019 |
| • Q3 2019 Business Update | 14 November 2019 |
| • 2019 full year results | 27 February 2020 |
| • 2019 annual report publication | 2 April 2020 |

SHAREHOLDERS & COVERAGE

Shareholder overview *(as per 26 Sept 2019)*

Shareholder >3% table	# shares	% shares
Invesco, Ltd.	6,969,077	12.4%
Johnson & Johnson Innovation	5,890,099	10.5%
Debiopharm Innovation Fund	4,249,707	7.5%
Sycomore Asset Management	2,921,470	5.2%
ParticipatieMaatschappij Vlaanderen NV (Flemish Region)	2,342,345	4.2%
Other institutional and retail investors	33,988,390	60.3%
Total outstanding shares (non-diluted)	56,361,088	100.0%

Note: The percentages above are based on the most recent transparency notifications received by Biocartis. The Biocartis investor website for more details.

Stock facts

IPO date: 27 April 2015, Euronext Brussels

ISIN: BE0974281132

Ticker: BCART

Market cap: ~EUR 580m (4 September 2019)

Coverage



Michael Ruzic-Gauthier



Hugo Solvet



Trevor Hougen



Lenny Van Steenhuyse & Sandra Cauwenberghs



Alexandru Cogut



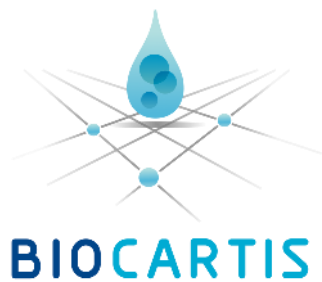
Kris Kippers



Dylan van Haaften & Anita Yé

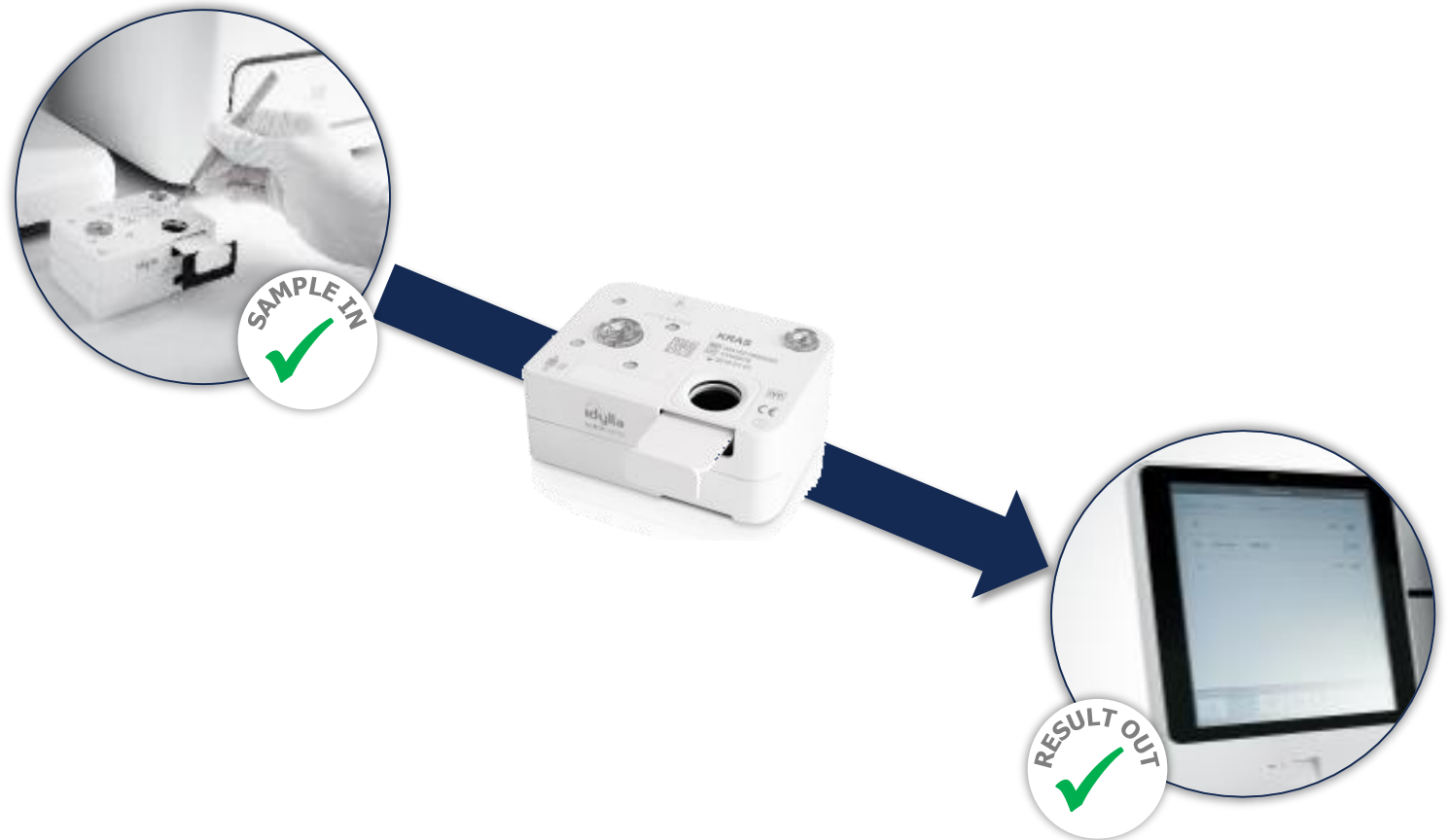
Appendix

ID
YLL
A



FEWER ERRONEOUS RESULTS DUE TO STANDARDIZED CARTRIDGE

- Virtually any sample type
- No sample pre-treatment
- All reagents on board
- No PCR lab infrastructure
- No cold chain
- Stable at room temperature



Offering potential for CLIA waiver

FFPE (FORMALIN-FIXED AND PARAFFIN-EMBEDDED) SAMPLE

Step 1: tissue macroscopy



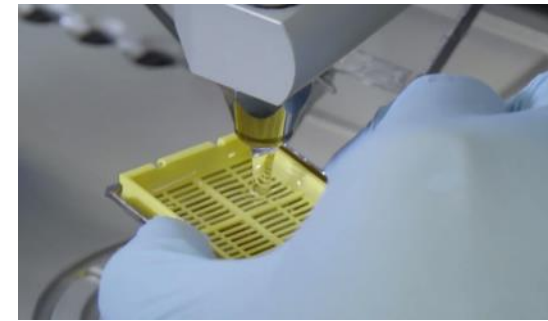
A laboratory technician cuts the tissue into smaller pieces

Step 2: formalin-fixing



This incubates overnight in formalin for optimal conservation while maintaining the fixation of the morphology

Step 3: paraffin-embedding



The next day, the tissue is embedded in fluid paraffin

Step 4: microtome cutting



The paraffin block is then cut into thin slices (tissue sections), suitable for (microscopic) analysis

FFPE is the gold standard sample type within oncology

TARGETED THERAPIES: TOWARDS ACTIONABLE 2-CARTRIDGE MENUS & PAN-CANCER APPLICATIONS

Cancer-specific applications

2-cartridge menus for current cancer markets

- Enhanced development capabilities allow for higher number of targets in one Idylla™ cartridge
- Opportunity to offer actionable 1st line menus based on two Idylla™ cartridges only:



**CRC¹
menu**

1. KRAS/NRAS/BRAF
2. MSI



**Lung
menu**

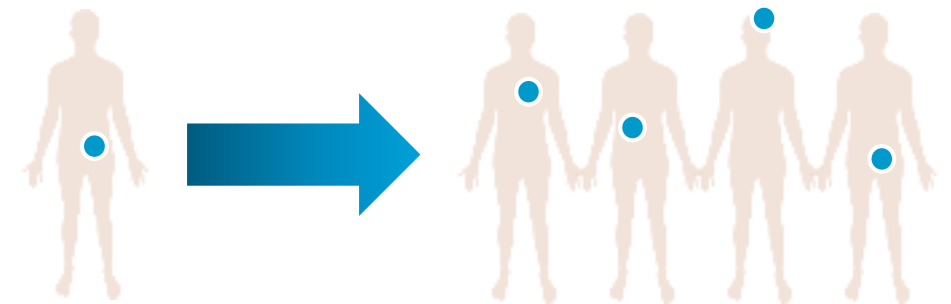
1. EGFR/BRAF+ (DNA-based)
2. GeneFusion (RNA-based)

New areas

- Development of new tests for additional cancer types e.g.:
 - Breast cancer
 - Gastric cancers
 - Hematological cancers
- Validation existing menu for additional sample types

Pan-cancer applications

- Core tests of cancer-specific menu are applicable for pan-cancer applications



Idylla™ cartridge

- KRAS/NRAS/BRAF
- MSI
- GeneFusion (NTRK)

Select potential applications

- Breast, endometrial, cervical
- Gastric, prostate, endometrial
- Gastro-intestinal, breast

Comprehensive actionable 1st-line menu in 2-cartridge format allows for higher market shares and gross margins

Efficient access to pan-cancer setting (validation of existing menu)

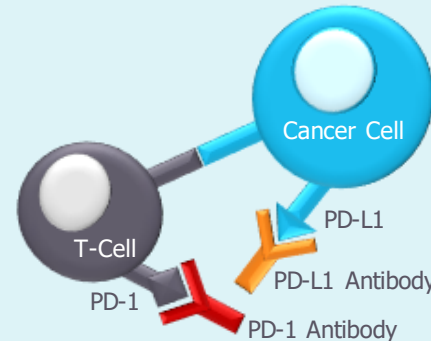
IMMUNOTHERAPY: TOWARDS MENU SERVING MAJOR THERAPY CLASSES

Idylla™ addressable immunotherapy segments

Immune checkpoint inhib

Prevent tumor from hiding from the immr

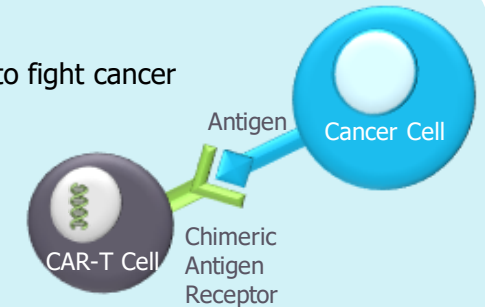
- **Immune cells can fight** cancer
- **Cancers can hide** from immune cells
- Immune checkpoint inhibitors such as **Keytruda®¹** prevent this hiding
- Such inhibitors often act **pan-cancer**



Cell therapy

Deploy immune cells designed to fight cancer

- Immune cells can be specifically **selected or engineered to fight** cancer
- To date, cell therapies have proven successful in **hematological** cancers
- Clinical trials ongoing also for **solid** cancers



Idylla™ for immune checkpoint inhibitors

Idylla™ MSI test

- May be validated for immunotherapy (i.e. immune checkpoint inhibitors) selection
- Initial focus on CRC immunotherapy
- Pan-cancer validation in the future

Idylla™ for both major therapeutic classes

Idylla™ Hot-Cold signature

- Is the immune system already fighting this cancer? Does it need to be enabled?

Idylla™ immunotherapy resistance test

- Is the tumor resistant to immunotherapy?

Idylla™ for cell therapy

Idylla™ test(s) for patient management

- Cell therapies are highly successful
- Therapy cost (e.g., hospitalization) and side effects create high need for rapid patient management around treatment

Growth in emerging therapeutic areas. Address testing needs of major immuno-therapies and leverage menu toward pan-cancer applications

MONITORING: LIQUID BIOPSY TESTING FOR ON- & POST-THERAPY MONITORING

Liquid biopsy testing

- Access genetic tumor information via **liquid samples**:
 - Blood
 - Urine
 - Saliva
- Advantages over **solid biopsy testing**:
 - Less invasive
 - Less expensive
 - Less sampling bias
 - More repeatable
 - Real-time mutation status
- **Improved detection** of low burden disease:
 - Earlier and more accurate than current protein tests; earlier than imaging
 - Advantage for MRD¹, recurrence monitoring

Idylla™ liquid biopsy and monitoring menu

Cancer care continuum

Pre-diagnosis

Diagnosis

- Inherited risk
- Screening / early detection

Pre-therapy

Treatment Start

- Prognostics / stratification
- Therapy selection

On-therapy

Treatment Stop

- Response monitoring
- Resistance monitoring

Post-therapy

Relapse

- Post-therapy MRD¹
- Recurrence monitoring

Recurrence

- Therapy selection
- Recurrence management

Menu focus

1

Therapy selection

- Liquid biopsies **complement solid biopsy** menu
- Focus: if **tissue not available** at diagnosis or at progression

2

Response monitoring and post-therapy MRD¹

- **Focus**: applications that **require Idylla™ speed** and are backed by growing evidence of **clinical utility**:
 - On-therapy monitoring
 - Post-treatment MRD¹
- Population: **Mid and late stage** patients across most cancer types

3

Recurrence monitoring

- Focus: on **hematological** cancers (e.g., CML²) as these are **established markets** (i.e. guidelines inclusion)
- Population: long-term therapy and recurrence monitoring

A high volume menu for repeat-testing applications that require Idylla™'s unmatched turn-around-time.

Address testing needs across early & late stage cancers for a range of major cancer treatments.

Access new customer base: hemato-oncologists & blood testing laboratories

GENE SIGNATURES: HIGH VALUE & VOLUME MENU DEVELOPED BY PARTNERS

Market landscape

- Growing number of tests
 - Driven by genomic discovery and validation efforts over past decade
- Broad range of testing applications
 - Prognostic, risk stratification, screening tests, etc.
 - Tests are generally cancer-specific
- Diverse cancers and sample types
 - On-market or in development for many solid and hematological cancers
 - Solid & liquid samples

Example collaboration Genomic Health



- Market leader in breast, urology cancer

Test selection criteria

- Focus on oncology tests
- Clinically validated content
 - Increases barrier to entry for competitors
- High clinical utility and reimbursement
 - Provides attractive pricing and fast market adoption
- High volume applications
 - Large addressable population
 - High market share potential
 - Repeat testing

- Biocartis development partner
 - ✓ Clinically validated
 - ✓ High reimbursement
 - ✓ Attractive volumes

Idylla™ opportunity

- Additional cancer franchises
 - Complementary menu (e.g. breast cancer)
- Expansion into new customer segments
 - General oncology
 - Oncology sub-specialties within urology, dermatology, hematology...
- Broader commercial footprint
 - Commercialization supported by sales network partner
- Development mainly partner-funded

- Breast: launch 2020
- Urology franchise opportunity
 - Initial focus on prostate cancer

Complementary menu with proprietary high value & volume tests, with a focus on existing & potentially additional customer segments



CONTACT

Biocartis Investor Relations
Generaal de Wittelaan 11 B3
2800 Mechelen
BELGIUM

tel. +32 15 63 17 29

ir@biocartis.com

www.biocartis.com