



Ambu the single-use company

Visualization update

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June, 2019

- 1** **Ambu overview and priorities for 2019/20**
- 2** R&D as a competitive advantage and pipeline update
- 3** Commercial execution
- 4** Financial guidance
- 5** Q&A

Ambu – the Single-use company

What makes Ambu unique?



**Global pioneer
and leader of
single-use
endoscopy**



**Major market
opportunities –
100M annual
procedures**



**Market leading
R&D and
innovation within
single-use
endoscopy**

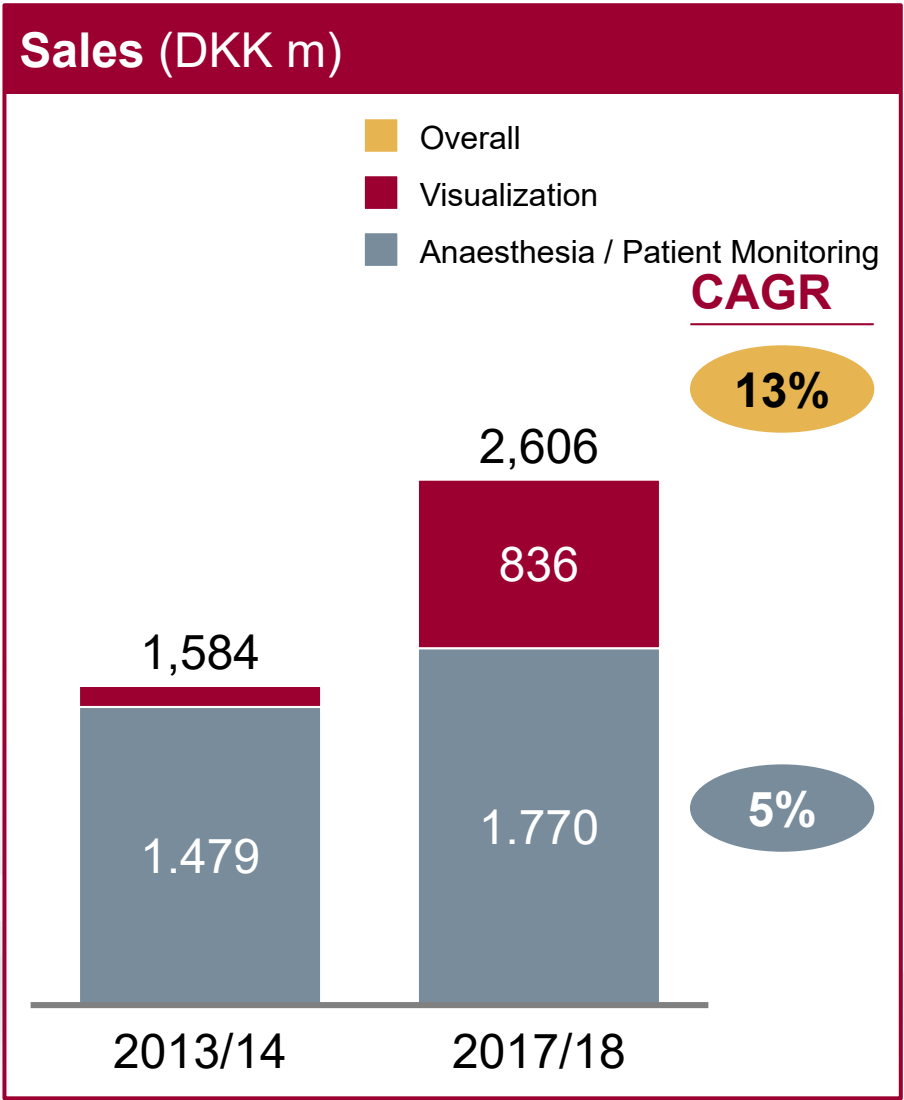
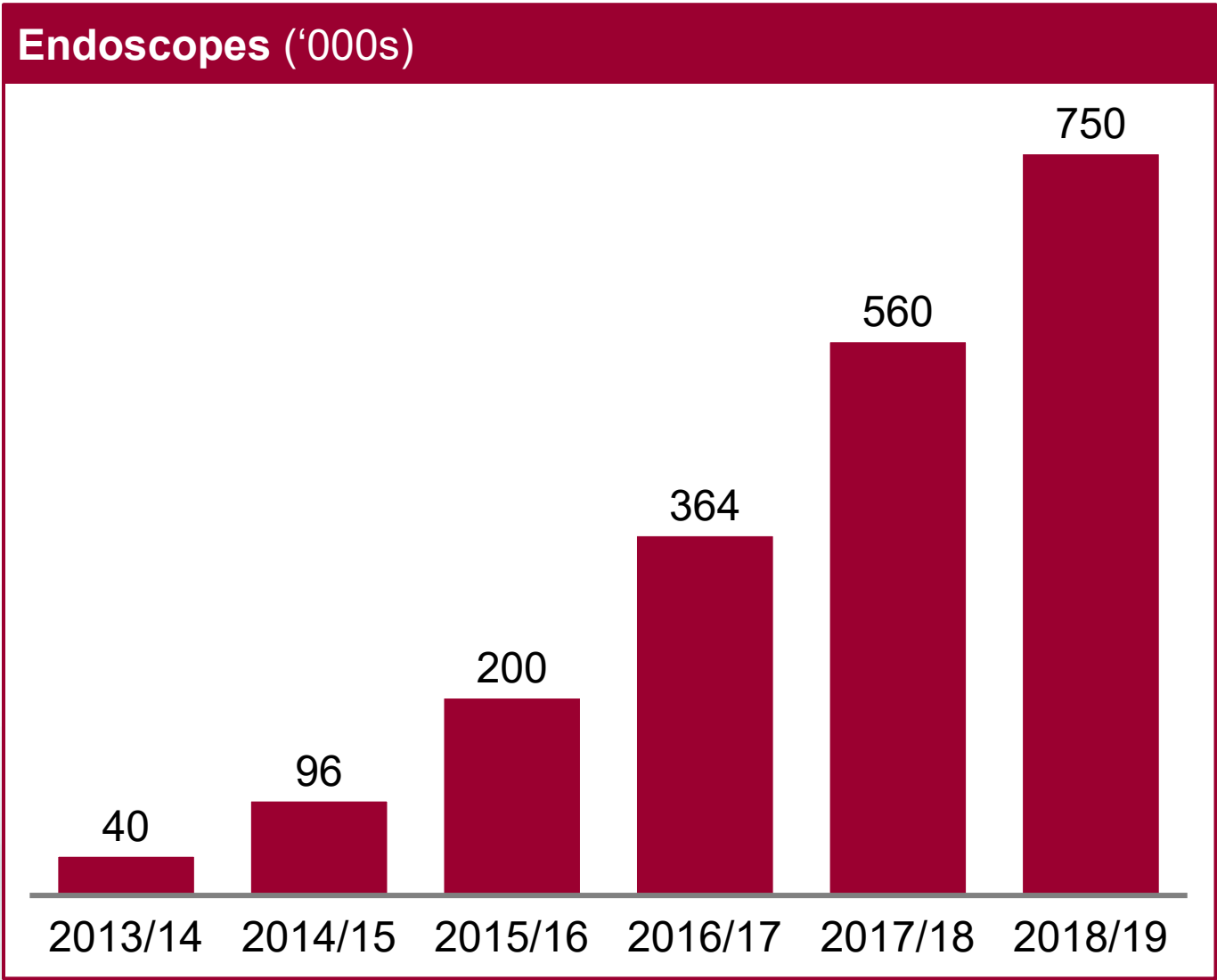


**One of the
fastest growing
companies in
MedTech**



**Robust
financial
position to fund
growth**

Ambu's transformation into the Global leader of single-use endoscopy

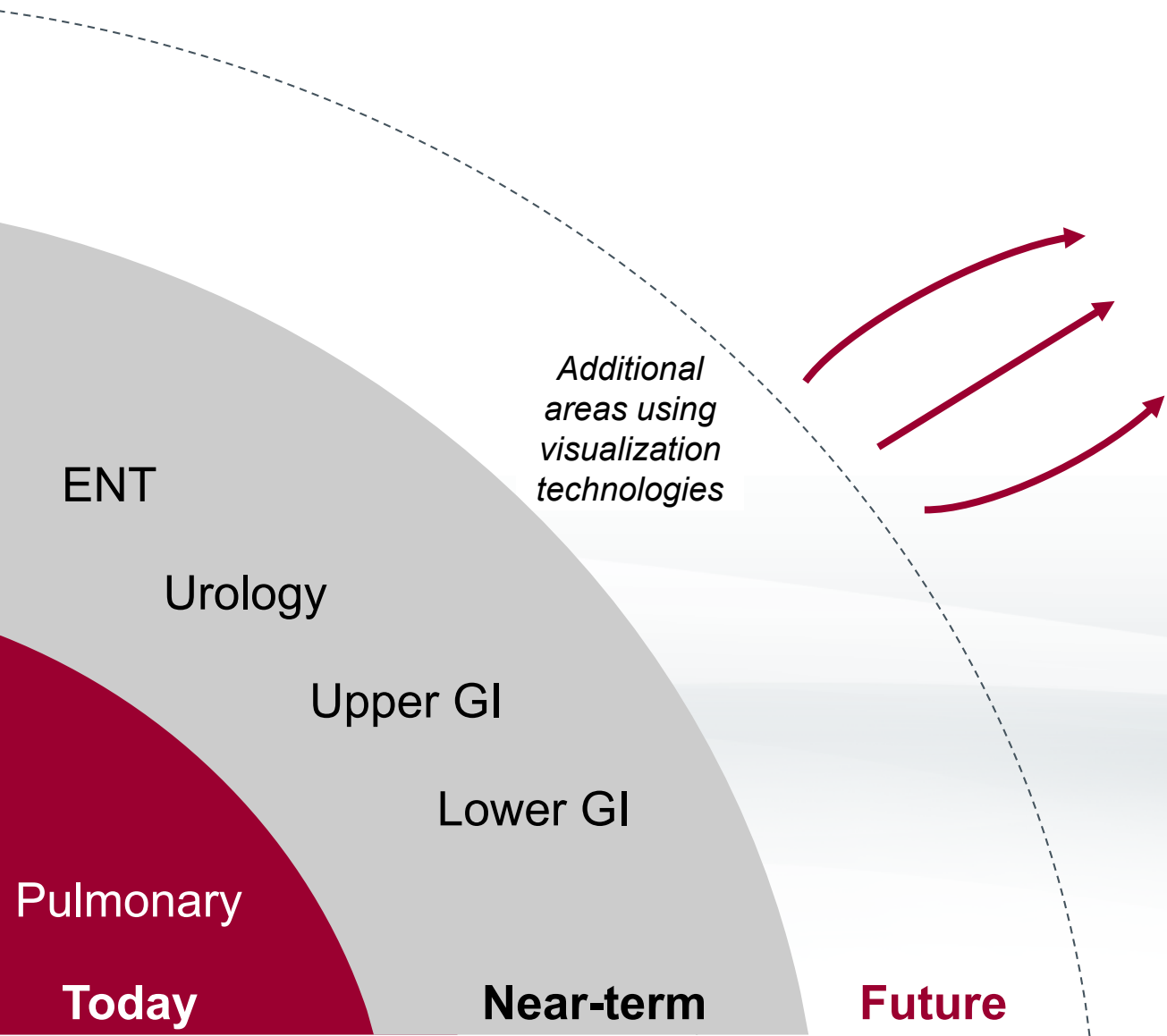


Strong track record of new market creation through transformative innovation

Significant expansion potential



Opportunity overview



Key points:

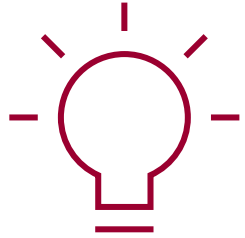
- Significantly expand near-term addressable market by 30x to 100M units
- Full offering including specialty scopes
- Expand into diagnostic and therapeutic field
- Significant future opportunities to sustain top-tier long-term growth

Ambu's key advantages in single-use endoscopy



1%-share points of near-term market potential (100M) would more than double existing visualization business

Building blocks of Ambu's 2019/20 Visualization strategy



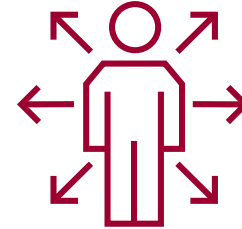
Innovation

- Further enhance R&D competitive advantage
- Execute on near-term visualization pipeline
- Develop differentiated future technologies (e.g., multi-functional image quality, AI etc)



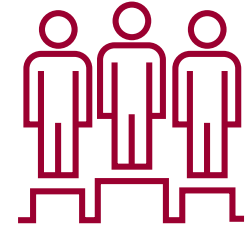
Globalization

- Purposeful expansion of direct salesforce and marketing infrastructure
- Focus on key geographies: US, Western Europe, China, Japan, Australia
- Establish selective strategic partnerships (e.g., Cook Medical)



Capability expansion

- Global operations network expansion to enable sustained growth and maintain low cost footprint
- Enhance critical commercial and enabling capabilities (e.g., healthcare economics, GPO contracting, clinical evidence)



Talent and Culture

- Strengthening our winning spirit and culture while rapidly expanding the organization
- Expand critical talent:
 - US and key geographies for commercial organization
 - Innovation (Malaysia / Germany/ Denmark)

1

Ambu overview and priorities for 2019/20

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R&D as a competitive advantage and pipeline update

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Q&A

Dedicated single-use visualization R&D at Ambu



5

R&D centers

with access to the best global visualization talent

~160

Dedicated FTEs and growing

5

Exclusive strategic technology partners

provide further access to leading technology

12+

Development capacity to launch new products within the next 3 years

Key technology tracks

- Image quality (sensor, light, image processing, tip design, lenses, AI, etc)
- Display unit (Firmware, GUI SW, EMR integration, electrical safety)
- Mechanical performance (bending, working channel, robustness, etc)

Significant advantages in visualization core competencies

Camera technology

- Sensor technology, cables, low cost HD, +1MB sensor, lenses

Tip design

- Small size tip, Large size tip with working channels
- 2K tip, 120 & 140 FOV, environmental encapsulation

Light

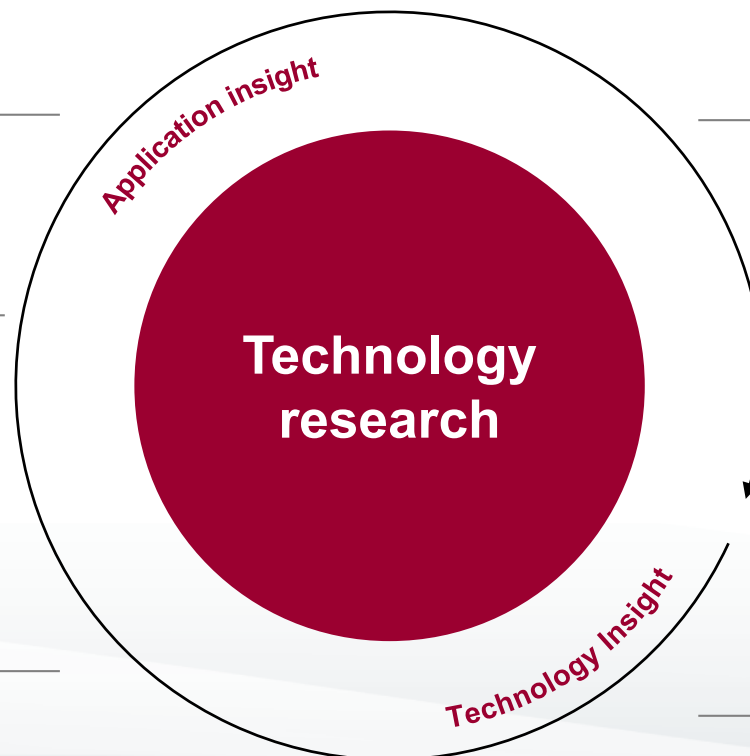
- Light guides, fiber light, blue/green light, LED color, Anatomical light, Blue light

Image pipeline

- NBI alternatives, Vascular enhancement (EVA), Image enhancements,

Monitor technology

- Portable screens, WIFI, Full HD, IT integration,
- Touch panel, Digital video out for std external monitors (aBox)



User insights process

- Ambu DNA to work agile and in an iterative relation to specific user groups

FPGA/GPU/CPU implementation

- FPGA programming, OS, Linux
- Embedded and application SW

Advanced Image processing

- Network design, Decision support, Tool navigation
- DL learning, AI Lesion detection

Bending section and handle design

- Mechanical simulation models, working channels
- 2- & 4 way bending, Brakes, ergonomic design

Electrical patient safety

- Safety certification (UL & EMC), patient isolation

As the global pioneer of single-use technology, Ambu has a robust, and difficult to replicate, visualization technology expertise

Our innovation aspiration for the next 3-5 years



Deliver **industry-best visualization** performance (across all scope types)



Develop full **single use portfolio offering** across all major applications / specialties



Develop **next-generation platforms** across all technology tracks (display unit, etc)



Build full **Artificial Intelligence diagnostic capabilities**



Invest in future **critical enablers** (e.g., healthcare economics, evidence generation)

Establish single-use endoscopy as the standard of care

Current visualization portfolio



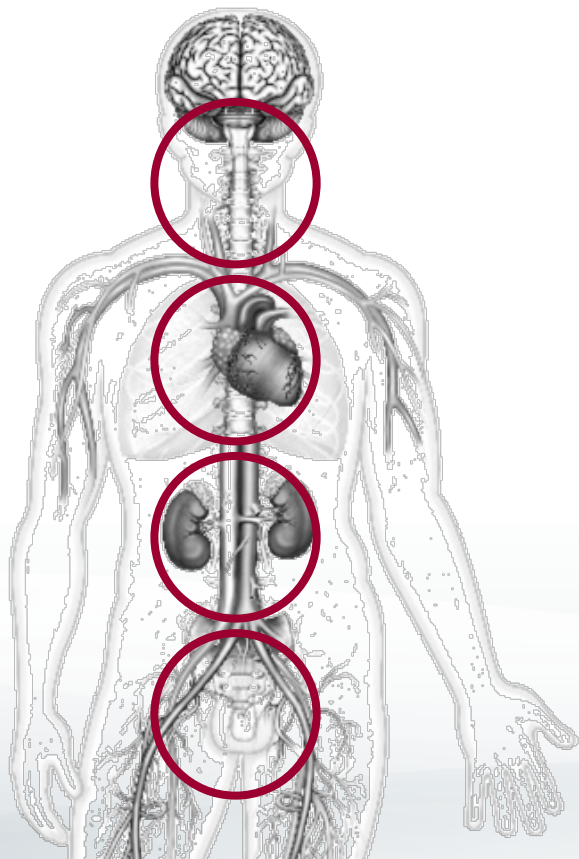
Market opportunity
(annual procedures)



Commercially available



Pipeline



System	Category	Market Opportunity (m)	Status	Products
aView™ 2 Advance	1 Pulmonary	5m	✓	<ul style="list-style-type: none"> aScope™ 4 Broncho VivaSight BronchoSampler™
	2 ENT	11m	✓	<ul style="list-style-type: none"> Slim (US launch May 2019) Intervention (EU and Australia)
	3 Urology	8m	⋯	<ul style="list-style-type: none"> Isiris
aBox™ Console	4 Colonoscopy	50m	⋯	
	5 Gastroscopy	20m	⋯	
	6 Duodeno-scopy	2m	⋯	

A next-generation monitor platform technology that allows Full-HD-quality



Two offerings that will cover our full portfolio

aView™ 2 Advance



Pulmonary, ENT, Urology

aBox™



Development of a console for the aScope GI portfolio, that will enable connection to current monitors and EMR systems in hospitals

- Compatible with both existing and future scopes
- The technology will enable connection to EMR systems in hospitals and make 1920x1080 pixel resolution available
- Significantly enhanced image quality – best in class for single-use bronchoscopes
- Ambu-developed NBI alternatives such as Vascular enhancement (EVA™)

Q3, 2019/20

Q2, 2020/21

◇ aView™ 2 Advance

◇ aBox™

Monitor platform that will significant enhance our entire single-use portfolio

1 Pulmonary: Expanding from a position of strength – New aScope™ 5

Market opportunity: Incremental 2M annual procedures with aScope™ 5 (current market 3M)



- All single use benefits (e.g., no cross-contamination, hospital reprocessing, lower cost, always available for physicians, etc.)
- New aView™ 2 Advance will provide a significant better image quality for the aScope™ 4
- aScope™ 5 in development
 - HD camera chip and optimized for diagnostic use
 - Compatible with existing tools
 - aScope 5 and the aView 2 advance will open up for incremental 2M procedures within the bronch suite

Q3, 2019/20

Q4, 2020/21



aView™ 2 advance monitor

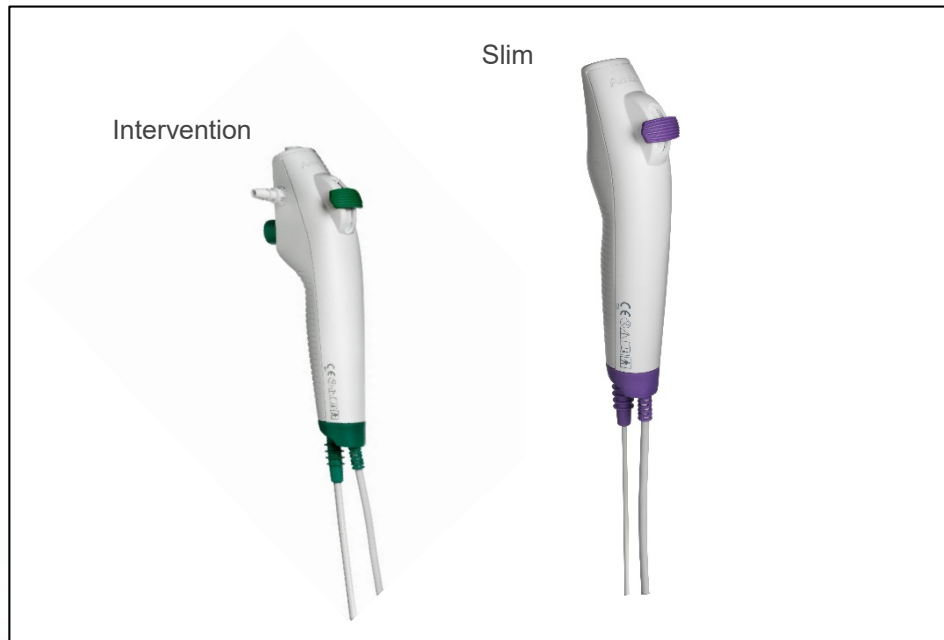


aScope™ 5

~20% and growing market share with next-gen pipeline well underway

2 ENT: Fully focused on commercial launch

Market opportunity: 11m procedures



- FDA approval of the Slim scope in May 2019
- The slim version targets 95% of the ENT market
- All single use benefits (e.g., no hospital reprocessing, availability etc.)
- Strong early traction with Slim offering in hospital segment (initial focus area)
- First Intervention study released with positive feedback¹ – anticipate approval Summer 2019

Q1, 2018/19

Q2, 2018/19

Q3, 2018/19

Q4, 2018/19



Intervention launch in EU & AU



Slim launch in EU & AU



Slim launch in US



Intervention launch in US

Significant near-term opportunity in a 11 million market

¹ * Becker et al (2019) - First experiences with a new flexible single-use rhino-laryngoscope with working channel - a preliminary study – [Link](#)

aScope™ 4 RhinoLaryngo Intervention is currently not for sale in the U.S.

③ Urology: Developing a full portfolio - ureteroscope is on the product pipeline

Market opportunity: 8m procedures (~ 6m Cystoscopy and ~ 2m Ureteroscopy)

Cystoscope



- Cystoscope (to evaluate urethra and bladder) is a routine use diagnostic scope
- To complete our urology portfolio, we will be introducing a ureteroscope to target kidney-procedures
- Ureteroscope (for ureters and kidneys) will have interventional capabilities (e.g., stone removal)
- The combination of a single-use cystoscope and ureteroscope is ideal as physicians in many cases use both on the same patient
- Both urology scopes will be integrated with our aView™ 2 Advance

US launch

Q2, 2019/20

Full global launch

Q1, 2020/21

2021/22

◇ Cystoscope

◇ Cystoscope

◇ Ureteroscope

Significant urology expansion beyond current Isiris offering

4 + 5 Entering GI accelerated by combining Ambu and Invendo technologies

What we got from the Invendo acquisition

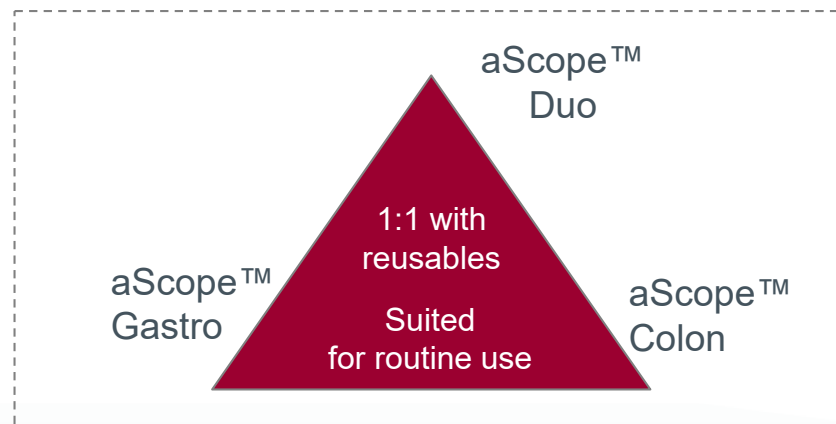
A technology platform for GI visualization

An innovative organization with deep knowledge of GI

An almost FDA-approved colonoscope (SC210) ready for market testing

The two tracks we started to enter in GI

A Development of a basic line of GI aScopes



B Evaluation of the SC210

SC210

Novel control / steering

Larger diameter and different bending section

Unique properties on flexibility and stiffness

aScope™ colon

Classic wheel & wire control

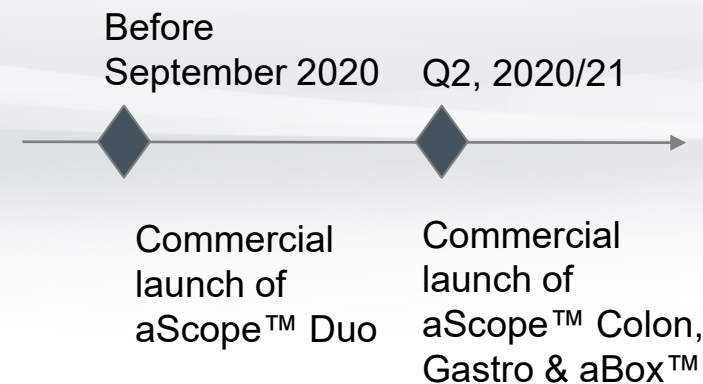
Standard diameter and insertion tube

Similar feel to reusable scopes

Conclusion

We will prioritize aScope™ Colon and discontinue SC210

Timeline



6 Duodenoscope: Ambu's first entry into GI

Market opportunity: 2M annual procedures (700K in US)

DDW showcase



- All single use benefits (e.g., no cross-contamination, hospital reprocessing, etc.)
- Rapid learning curve / fast adoption expected
- Lightweight to optimize usability
- Cook, our US partner, is a strong GI player, especially in ERCP tools

US launch

Before September 2020

 aScope™ Duo

Cook partnership key to rapidly penetrate ERCP opportunity and establish GI foothold

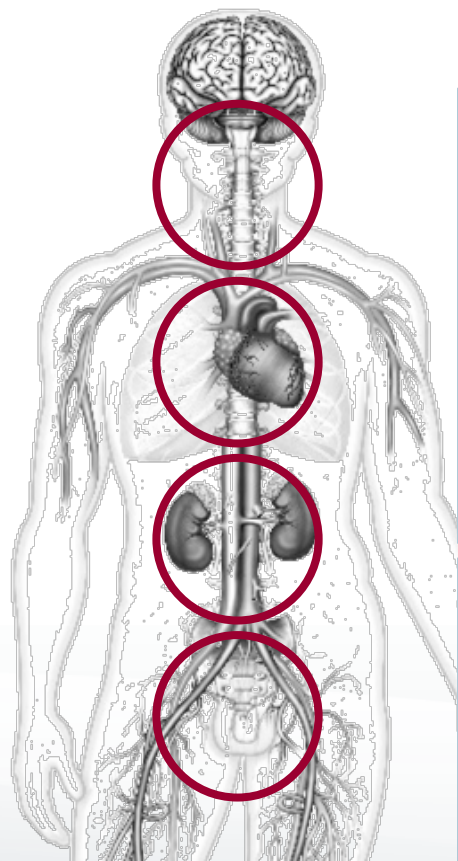
Near-term visualization portfolio



Market opportunity
(annual procedures)



Commercially available



aView 2 Advance

1 Pulmonary 5m

aScope™ 5
aScope™ 4
BronchoSampler™

Q4, 2020/21



2 ENT 11m

Intervention

✓ (EU and AUS)

Slim



3 Urology 8m

Isiris
Cystoscope
Ureteroscope

Q2, 2019/20
2021/22



aBox™ Console

4 Colonoscopy 50m

aScope™ Colonoscope

Q2, 2020/21

5 Gastroscopy 20m

aScope™ Gastroscope

Q2, 2020/21

6 Duodenoscopy 2m

aScope™ Duodenoscope

Before Sep. 2020

Launch plan

Significant portfolio expansion over the next 2 years

- More than 6 new scopes
- 2 new display units
- Innovation modular and scalable
- Increasing cadence of innovation going forward

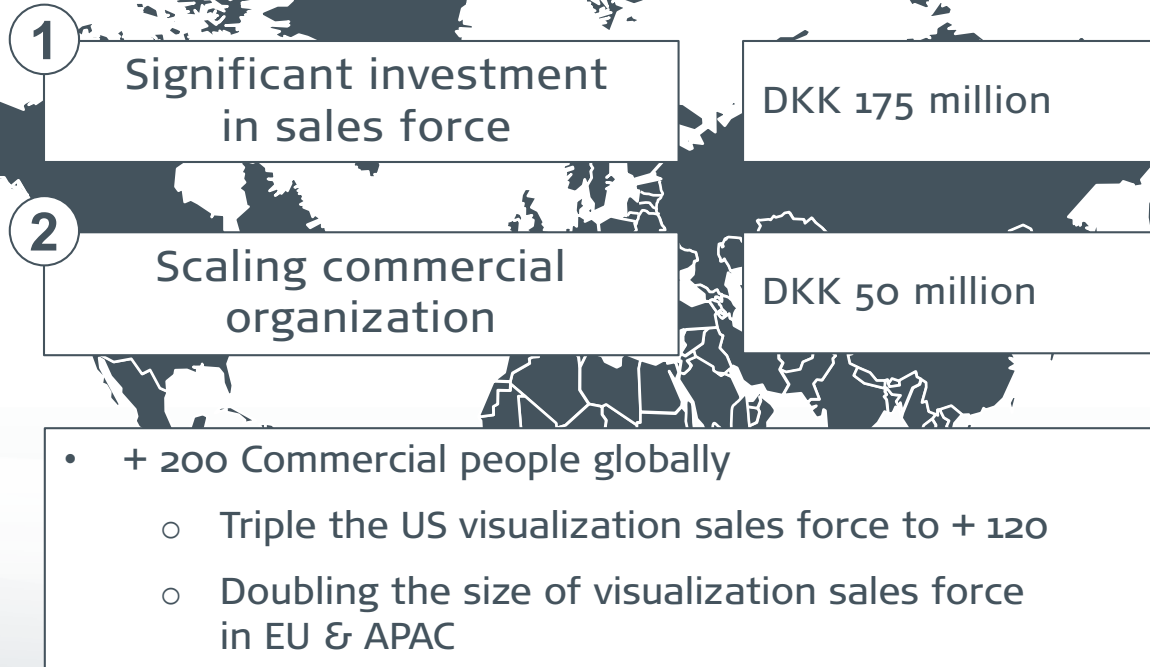
Developing a best-in-class single use endoscopy portfolio – significant breadth and depth

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We will invest DKK 225 million in 2019/20 to maximize the growth potential after 2020



Accelerating commercial infrastructure in 2019/20



Key commercial focus areas to maximize pipeline value and maintain first mover advantage:

- Focus markets: US, Western Europe, APAC (China, Japan, Australia)
 - US market is key to sustain top-tier near-term growth
 - Significant ROW opportunity in focus markets
- Tailored GTM approach for each market
- Enhanced critical commercial capabilities

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We expect 16-19% topline growth in 2019/20 and are adjusting our EBIT-margin due to accelerating commercial infrastructure

Financial outlook for 2018/19 and 2019/20

Financial outlook	Financial year 2018/19		Financial year 2019/20	
	Old	New	Old	New
Endoscopes sold (unit)	+750k	~750k	+1 million	~1 million
Organic growth	15-16%	14-15%	18-23%	16-19%
EBIT margin	22-24%	~22%	26-28%	+20%
Free cash flow (excluding M&A)	DKK 400-475m	DKK ~375	~ 18% of revenue	9% of revenue

- The reason for the adjustment of the growth is due to the discontinuation of the SC210
- The adjustment of the EBIT margin is driven by the lower growth and the investments in commercial infrastructure
- The adjustment to free cash flows is caused by the lower EBIT and a slightly increasing working capital
- The high comparable in Q3 2017/18 will reduce growth in Q3 2018/19

What makes Ambu unique

- ✓ Pioneering single-use disposable endoscopy
- ✓ Major market opportunities to increase penetration worldwide
- ✓ Market leading R&D and innovation
- ✓ Top-tier growth profile
- ✓ Robust financial position



Ambu – the single-use company