



# LiDCO

## Results Presentation

Year ended 31 January 2017

**March 2017**

**Matt Sassone**     Chief Executive Officer  
**Paul Clifford**     Finance Director



Emergency Room



Operating Room

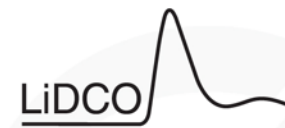


Intensive Care Unit



High Dependency Unit

# Disclaimer



These presentation slides and the accompanying verbal presentation (the "Presentation Materials") do not constitute or form part of any invitation, offer for sale or subscription or any solicitation for any offer to buy or subscribe for any securities in LiDCO Group Plc (the "Company") ("Company Securities") nor shall they or any part of them form the basis of or be relied upon in connection with, or act as any inducement to enter into, any contract or commitment with respect to Company Securities. These Presentation Materials do not constitute a recommendation regarding any decision to sell or purchase Company Securities.

These Presentation Materials are for information purposes only and must not be used or relied upon for the purpose of making any investment decision or engaging in any investment activity. Whilst the information contained herein has been prepared in good faith, neither the Company, its subsidiaries (together with the Company, the "Group") nor any of the Group's directors, officers, employees, agents or advisers makes any representation or warranty in respect of the accuracy or completeness of the contents of the Presentation Materials or otherwise in relation to the Group or its businesses, and responsibility and liability therefor (whether direct or indirect, express or implied, contractual, tortious, statutory or otherwise) is expressly disclaimed, provided that nothing herein is intended to limit the liability of any such person for fraud. No duty of care or advisory obligation is owed by any member of the Group or any of its directors, officers, employees, agents or advisers to any recipient of the Presentation Materials. No reliance may be placed for any purpose whatsoever on the information contained in these Presentation Materials or the completeness or accuracy of such information. In particular, no representation or warranty, express or implied, is made as to the fairness, accuracy or completeness of the information or opinions contained herein, which have not been independently verified and may be in draft form. The figures and projections included in these Presentation Materials are based on internal assumptions made by the directors and employees of the Company and have not been reviewed or verified as to their accuracy by any third party. The information contained in these Presentation Materials are provided as at the date of this presentation and is subject to updating, completion, revision, verification and further amendment without notice. However, the Company does not undertake or agree to any obligation to provide the recipient with access to any additional information or to update these Presentation Materials or to correct any inaccuracies in, or omissions from these Presentation Materials which may become apparent.

The content of these Presentation Materials has not been approved by an authorised person within the meaning of the Financial Services and Markets Act 2000 ("FSMA"). Reliance on the Presentation Materials for the purpose of engaging in any investment activity may expose an individual to a significant risk of losing all of the property or other assets invested. Any person who is in any doubt about the subject matter to which this presentation relates should consult a person duly authorised for the purposes of FSMA who specialises in the acquisition of shares and other securities.

These Presentation Materials do not constitute an offer of transferable securities to the public for the purposes of section 85 FSMA. These Presentation Materials are exempt from the general restriction set out in section 21 FSMA on the communication of financial promotions on the grounds that they are directed only at: (i) persons whose ordinary activities involve them in acquiring, holding, managing and disposing of investments (as principal or agent) for the purposes of their business and who have professional experience in matters relating to investments or otherwise are "investment professionals" for the purposes of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order"); (ii) are persons who fall within Article 49(2)(a) to (d) of the Order; or (iii) otherwise fall within an applicable exemption within the Order (all such persons together being referred to as "Relevant Persons"). Persons of any other description, including those that do not have professional experience in matters relating to investment, should not rely or act upon the Presentation Materials. Any investment, investment activity or controlled activity to which the Presentation Materials may ultimately relate is available only to Relevant Persons and will be engaged in only with such Relevant Persons.

These Presentation Materials do not constitute an offer of securities for sale in the United States, Canada, Australia, Japan or the Republic of South Africa or in any other country outside the United Kingdom where such distribution may lead to a breach of any legal or regulatory requirement, nor must they be distributed to persons with addresses in the United States, Canada, Australia, Japan or the Republic of South Africa, or to any national or resident of the United States, Canada, Australia, Japan or the Republic of South Africa, or to any corporation, partnership, or other entity created or authorised under the laws thereof. Any such distribution could result in a violation of American, Canadian, Australian, Japanese or South African law. It is the responsibility of each recipient outside the United Kingdom to ensure compliance with the laws of and regulations of any relevant jurisdiction. These Presentation Materials are not for publication, release or distribution in, and may not be taken or transmitted into, the United States, Canada, Australia, Japan or the Republic of South Africa and may not be copied, forwarded, distributed or transmitted in or into the United States, Canada, Australia, Japan or the Republic of South Africa or any other jurisdiction where to do so would be unlawful. These Presentation Materials may not be provided to any person in Canada or to any person who may be subject to Canadian securities laws. The Company Securities have not been and will not be registered under the United States Securities Act of 1933, as amended (the "Securities Act"), or the securities laws of any state or other jurisdiction of the United States and may not be offered and sold in the United States except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act. There will be no public offering of Company Securities in the United States.

The Presentation Materials includes statements that are, or may be deemed to be, forward-looking statements. These forward-looking statements can be identified by the use of forward-looking terminology, including the terms "believes", "estimates", "plans", "projects", "anticipates", "expects", "intends", "may", "will", or "should" or, in each case, their negative or other variations or comparable terminology. These forward-looking statements include matters that are not historical facts and include statements regarding the Company's intentions, beliefs or current expectations concerning, among other things, the anticipated future performance of the Company. Any such forward-looking statements in the Presentation Materials reflect the Company's current expectations and projections about future events but, by their nature, forward-looking statements involve a number of risks, uncertainties and assumptions that could cause actual results or events to differ materially from those expressed or implied by the forward-looking statements. These risks, uncertainties and assumptions could adversely affect the outcome and financial effects of the plans and events described herein. Save as required by law or regulation or the rules of any securities exchange, the Company undertakes no obligation to release the results of any revisions to any forward-looking statements in this Presentation that may occur due to any change in its expectations or to reflect events or circumstances after the date of the Presentation Materials. In particular, no representation or warranty is given by the Company or Brandon Hill as to the achievement of, and no reliance should be placed on, any projections, targets, estimates or forecasts and nothing in the Presentation Materials is or should be relied on as a promise or representation as to any future event.

The Presentation Materials are confidential and being supplied to you solely for your own information and may not be reproduced, further distributed, or the contents otherwise divulged, directly or indirectly, to any other person or published, in whole or in part, for any purpose whatsoever.

finnCap Ltd ("finnCap") is authorised and regulated in the United Kingdom by the Financial Conduct Authority, are advising the Company and no one else in relation to the Company and will not be responsible to anyone other than the Company for providing the protections afforded to their respective clients. Any other person should seek their own independent legal, investment and tax advice as they see fit. Apart from the responsibilities and liabilities, if any, which may be imposed on finnCap by FSMA or the regulatory regime established thereunder, finnCap accept no responsibility whatsoever for the contents of the Presentation Materials, including their accuracy or completeness or for any other statement made or purported to be made by them, or on their or the Company's behalf, in connection with the Company or the proposed transaction. finnCap accordingly disclaim all and any liability whether arising in tort, contract or otherwise (save as referred to above) which they might otherwise have in respect of these Slides or the accompanying verbal presentation.

These Presentation Materials may contain inside information and accordingly you will not be able to deal in any securities of the Company before the information is made public in accordance with the insider dealing provisions of Part V of the Criminal Justice Act 1993. In addition, the Presentation Materials may constitute inside information for the purposes of article 7 of MAR and therefore you must not (i) engage or attempt to engage in (a) market manipulation or (b) insider dealing; (ii) recommend that another person engages in insider dealing or induce another person to engage in insider dealing; or (iii) unlawfully disclose inside information (as such terms are defined in MAR). No individual within the Company (or within its associates) or finnCap is by virtue of these Presentation Materials recommending, inducing or encouraging you to deal in the Company's securities.

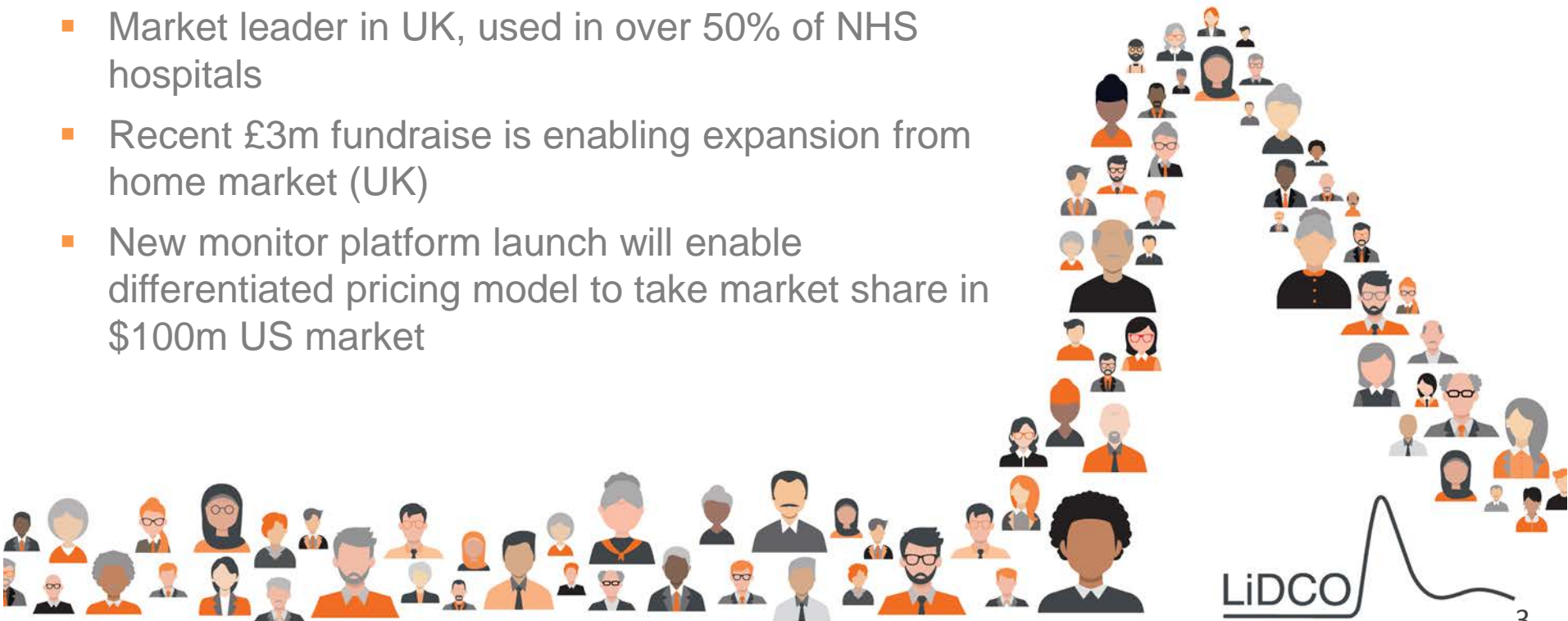
**WARNING:** You are advised to exercise caution in relation to these Presentation Materials. If you are in any doubt about any of the contents of these Presentation Materials, you should obtain independent professional advice.

# Overview



**Hemodynamic monitoring company, helping doctors to manage patient's cardiac function during high risk surgery and critical illness.**

- High margin repeat disposable business
- Wealth of clinical evidence endorsing technology
- Market leader in UK, used in over 50% of NHS hospitals
- Recent £3m fundraise is enabling expansion from home market (UK)
- New monitor platform launch will enable differentiated pricing model to take market share in \$100m US market



# Board Changes



**Theresa Wallis**

**Non-Executive  
Chairman**

- Former COO of AIM
- Wide experience of non-executive roles in various sectors

**Stepping down  
from Board at 2017  
AGM**



**Peter Grant**

**Non-Executive  
Director and  
Chairman Designate**

- Former Chief Executive Officer of Skyepharma Plc
- Former Chief Financial Officer at WorldPay plc & Group Chief Executive at Molins PLC



**Matt Sassone**

**Chief Executive  
Officer**

- 20+ years medical device experience
- Former Chief Marketing Officer of Maquet
- Former Regional President for Smiths Medical



**Paul Clifford**

**Finance Director**

- 28 years in finance positions with technology companies
- Former finance director of Comino Plc

**Retiring March 2017. Jill McGregor joining as CFO July 2017**



**Ian Brown**

**Non-Executive  
Director**

- 25 years medical device experience
- Extensive know-how of developing & launching new medical devices

**Stepping down  
from Board at 2017  
AGM**

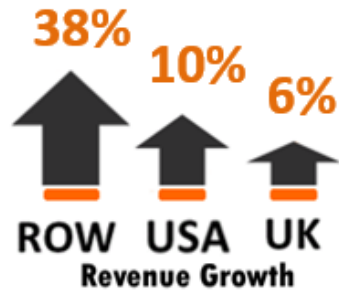


**Phil Cooper**

**Non-Executive  
Director**

- 30 years medical device experience
- Former president of the wound care division Mölnlycke Health Care

# FY16-17 Highlights



- ✓ LiDCO product revenue (excluding third party products) up 14% to £6.76m (2016: £5.96m)
- ✓ Surgical disposable unit sales up 17% to 46,580 (2016: 39,975)
- ✓ 227 monitors sold/placed (2016: 160) up 42%

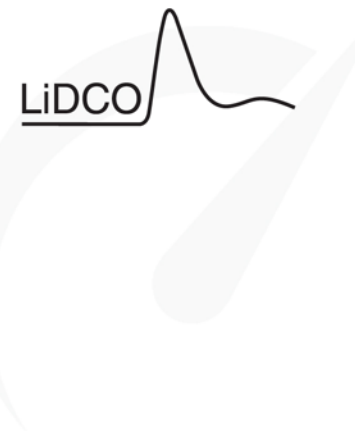


- ✓ Adjusted profit before tax\* of £0.06m (2016: loss £0.34m)
- ✓ Gross margins (excluding third party products) of 79% (2016: 81%)
- ✓ Fundraise of £3.0m. Year end cash £4.9m & debt free



- ✓ US expansion commenced with appointment of Head of North America in January 2017
- ✓ Launch of new LiDCO<sup>unity</sup> hemodynamic monitor in USA & Europe. LiDCO<sup>rapid</sup><sup>v2</sup> regulatory approval in China

# Income Statement



|                                  | Jan 2017<br>£'000 | Jan 2016<br>£'000 |
|----------------------------------|-------------------|-------------------|
| Revenue                          | <b>8,212</b>      | 7,593             |
| Cost of sales                    | <b>(2,612)</b>    | (2,455)           |
| Gross profit                     | <b>5,600</b>      | 5,138             |
| Administrative expenses          | <b>(5,502)</b>    | (5,718)           |
| Operating profit                 | <b>98</b>         | (580)             |
| Share based payment              | <b>41</b>         | (72)              |
| Exceptional cost                 | -                 | (163)             |
| Adjusted operating profit/(loss) | <b>57</b>         | (345)             |
| Finance income/(expense)         | <b>4</b>          | 2                 |
| Profit/(loss) before tax         | <b>102</b>        | (578)             |
| Income tax                       | <b>85</b>         | 162               |
| Profit/(loss) after tax          | <b>187</b>        | (416)             |

- LiDCO product revenues up 14%
  - UK revenues up 6%
  - US revenues up 10%
  - ROW revenues up 38%
- LiDCO product margin 79% (2016: 81%)
- Administrative expenses\* up 1%

*\* before share-based payments and 2016 exceptional item*

# Cash Flow & Working Capital

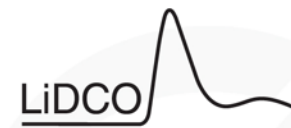


|                                      | Jan 2017<br>£000 | Jan 2016<br>£000 |
|--------------------------------------|------------------|------------------|
| Profit/(loss) before tax             | <b>102</b>       | (578)            |
| Cash flow from operating activities  | <b>1,205</b>     | 728              |
| Cash used in investing activities    | <b>(683)</b>     | (649)            |
| Net cash flow before financing       | <b>522</b>       | 79               |
| Net cash flow - financing activities | <b>2,792</b>     | (1)              |
| Net change in cash                   | <b>3,314</b>     | 78               |
| Opening cash                         | <b>1,587</b>     | 1,509            |
| Closing cash                         | <b>4,901</b>     | 1,587            |

- Inventory down £472k to £1.5m
- Product development cost of £461k (2016: £419k)
- Fundraise of £3.0m (£2.8m net) received January 2017
- Cash generative & debt free



# Revenues by region



|                        | Year to January 2017 |              |            |              | Year to January 2016 |              |            |              |
|------------------------|----------------------|--------------|------------|--------------|----------------------|--------------|------------|--------------|
|                        | Monitors             | Disposables  | Other      | Total        | Monitors             | Disposables  | Other      | Total        |
|                        | £'000                | £'000        | £'000      | £'000        | £'000                | £'000        | £'000      | £'000        |
| <b>LiDCO products</b>  |                      |              |            |              |                      |              |            |              |
| UK - Total             | 336                  | 3,131        | 318        | 3,785        | 279                  | 2,983        | 322        | 3,584        |
| US                     | 295                  | 881          | 7          | 1,183        | 86                   | 976          | 9          | 1,071        |
| Japan                  | 32                   | 79           | -          | 111          | 9                    | 26           | -          | 35           |
| Europe                 | 267                  | 453          | 18         | 738          | 145                  | 572          | 15         | 732          |
| Rest of World          | 319                  | 624          | 3          | 946          | 265                  | 264          | 7          | 536          |
|                        | <b>1,249</b>         | <b>5,168</b> | <b>346</b> | <b>6,763</b> | <b>784</b>           | <b>4,821</b> | <b>353</b> | <b>5,958</b> |
| <b>3rd party sales</b> |                      |              |            |              |                      |              |            |              |
| UK                     | -                    | 1,449        | -          | 1,449        | -                    | 1,635        | -          | 1,635        |
| <b>Total revenue</b>   | <b>1,249</b>         | <b>6,617</b> | <b>346</b> | <b>8,212</b> | <b>784</b>           | <b>6,456</b> | <b>353</b> | <b>7,593</b> |

- **UK:** Strong disposables sales & monitor revenues driven by new Unity product
- **US:** Strong capital sales but disposables impacted by a significant customer loss
- **Japan:** Re-engaged distribution partner
- **EU & ROW:** Strong sales from China & Middle East



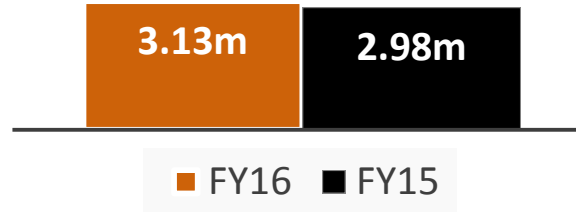
# UK Market



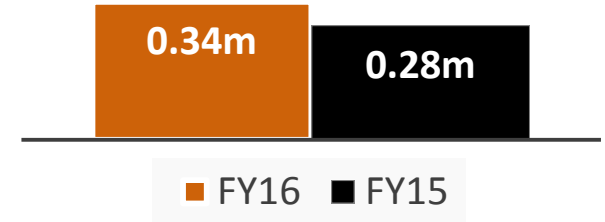
LiDCO products

6%

## Disposables

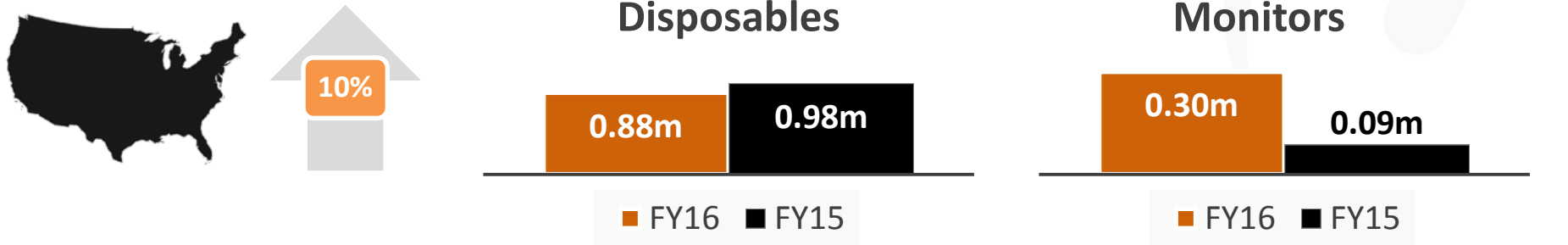


## Monitors



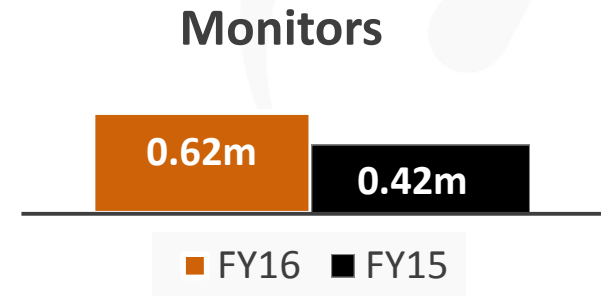
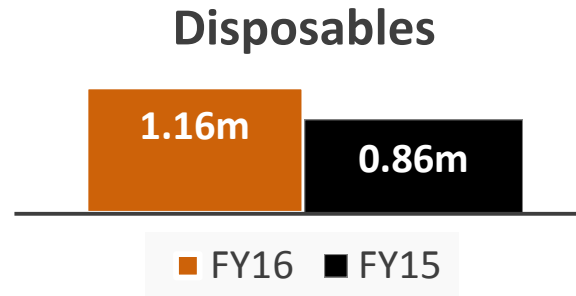
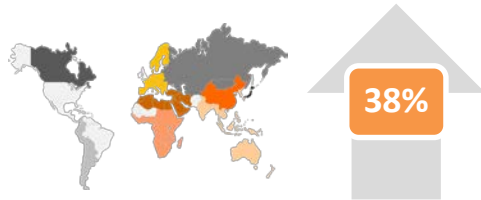
- Clear market leader
- Monitor revenues up 20% driven by sales of Unity with higher ASPs
- LiDCO disposable units were up 5% to 34,450 (2016: 32,865)
- NHS Supply Chain Framework Agreement
- Distributor appointed for N. Ireland & Republic of Ireland
- In discussions to support 7,500 patient national study of hemodynamic therapy for emergency bowel surgery
- Sales of third party products in the UK declined 11% to £1.45m (2016: £1.63m) due to pricing pressure

# USA Market



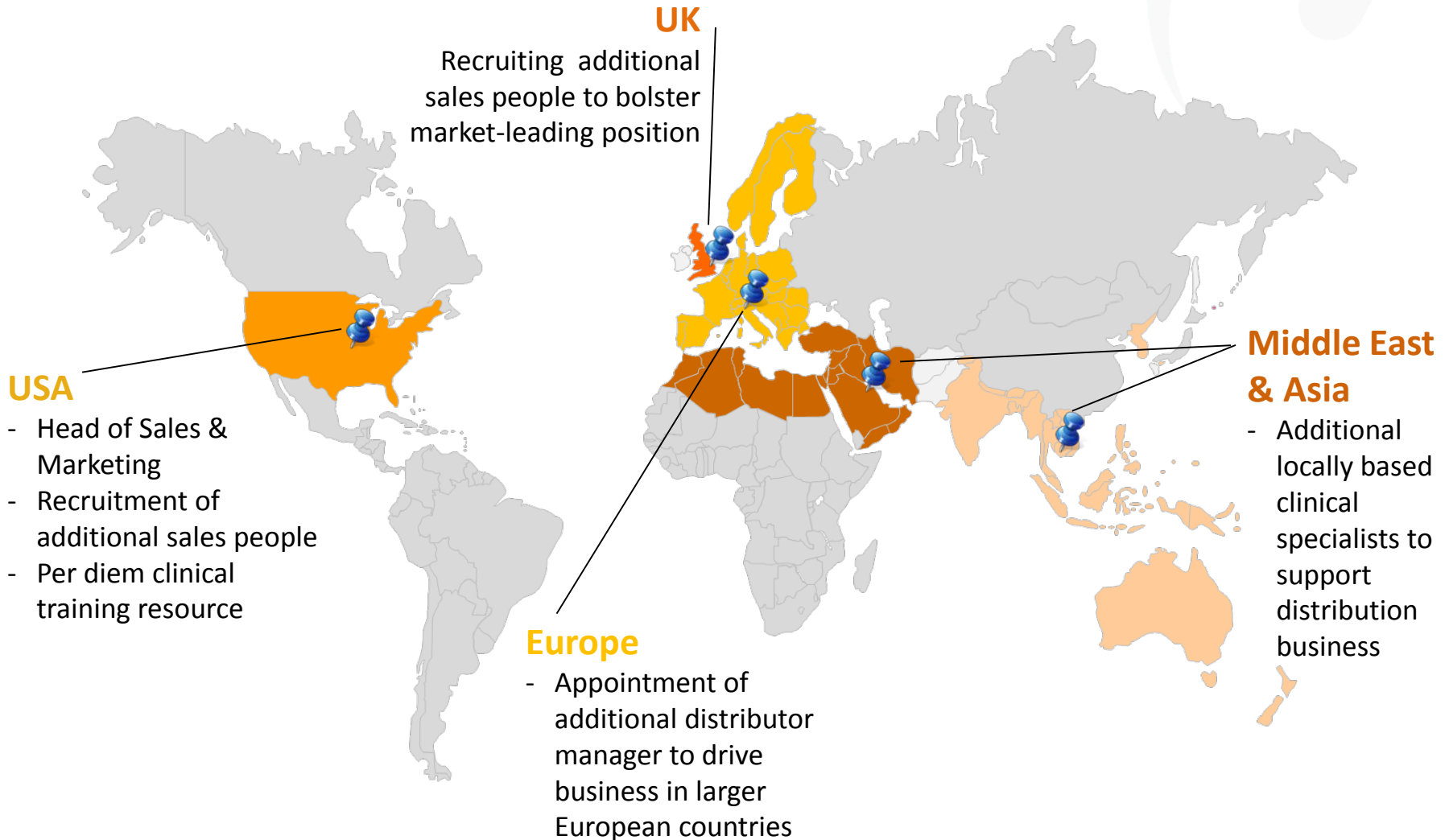
- Largest market with greatest opportunity for growth
- Significant customer loss in March 2016, impacted disposable revenue
- Dedicated sales person appointed on West Coast & commenced sales to individual 'MedAssets' hospitals
- ICU Medical new hemodynamic monitor (Cogent) that incorporates our technology commercial launch planned for spring 2017. Signed distribution agreement to sell LiDCO LXi non-invasive monitor
- Colorectal surgery recommendation by American Society for Enhanced Recovery (ASER) and Perioperative Quality Initiative (POQI)
- US expansion commenced with appointment of Head of North America in January 2017

# Distributor Markets



- **Japan** - launched the LiDCO*rapid*<sup>v2</sup> Unity software with non-invasive technology. Reviewing distribution arrangements
- **China** - strong sales after gaining registration in March 2016
- **Middle East** – sales up 20% and master distributor appointed
- **Europe** – strong position in a few selected markets
- **Europe** – Unity launched and first HUP\* sold to Switzerland
- **Master distribution** – in place for Middle East, Canada, Sub-Sahara Africa, SE Asia and former Soviet States

# Expansion plan – 2017 activities



# Expansion plan – tracker



## Key milestones for current year

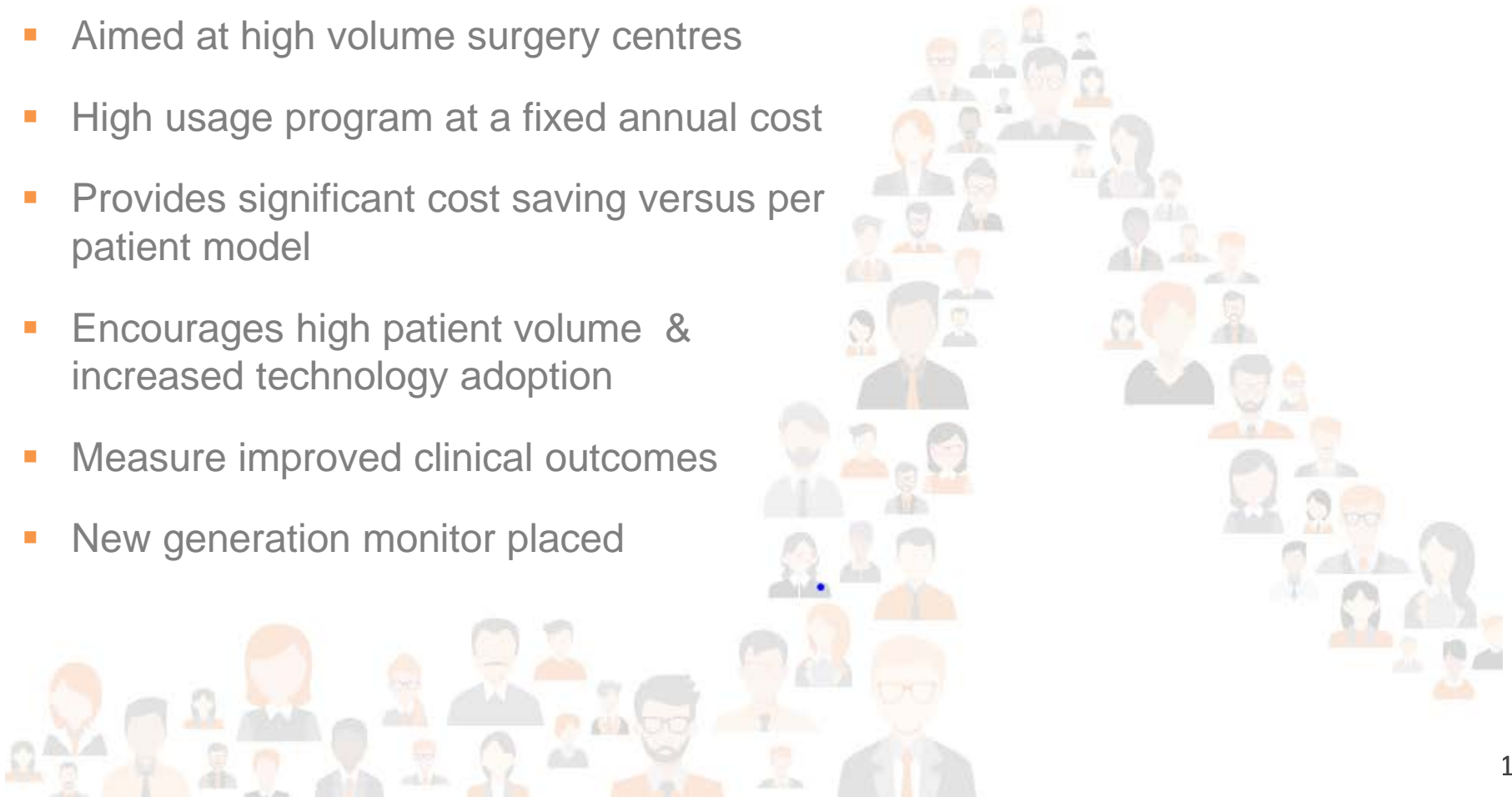
| Area         | Activity   | By when* |
|--------------|--|----------|
| USA          | ▪ Appoint head of North America                      | Done     |
|              | ▪ Recruit additional sales resource                  | Q2       |
|              | ▪ Win 7 High Usage Program Accounts                  | Q2 to Q4 |
| UK           | ▪ Recruit additional sales resource                  | Q1       |
| Distributors | ▪ Recruit European distribution manager              | Q1       |
|              | ▪ Recruit additional clinical specialists in regions | Q1 to Q4 |
| General      | ▪ Promotional campaign for High Usage Program        | Q2       |
|              | ▪ Launch new monitor platform                        | Q1 to Q2 |

*\*Quarters refer to LiDCO's financial year being 1<sup>st</sup> February to 31<sup>st</sup> January*

# High Usage Program

## A DIFFERENT WAY – DIFFERENTIATED PRICING MODEL TO GAIN MARKET SHARE

- Aimed at high volume surgery centres
- High usage program at a fixed annual cost
- Provides significant cost saving versus per patient model
- Encourages high patient volume & increased technology adoption
- Measure improved clinical outcomes
- New generation monitor placed



# New Monitor Platform



**Platform for future features and new clinical parameters. Enabling LiDCO to maintain its technology leadership position**



## New Features

- Sleek widescreen look
- New IP embedded into core algorithm
- Integrated clinical protocols
- Refreshed graphical display and menus
- Ability to display more parameters at same time
- Internal battery for portability
- WiFi connectivity

## Plus

- New High Usage Program functionality incorporated into software.

*Pending CE and FDA approval*



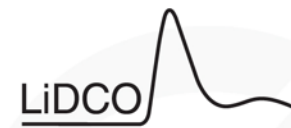
# Outlook



- Recent fundraising has transformed the outlook
- Investment in sales and marketing expected to be up by approx. £1.9m
- Targeting a year of significant sales growth
- Additional resources
- New high usage pricing model
- New products



# Summary



- FY16-17 financial performance delivering on the plan to expand from our core UK market-leading position
- Large growing market with technology adoption on increase
- High margin repeat disposable business
- Strong balance sheet is enabling the Group to invest in our commercial expansion plans
- New monitor platform\* launch will enable differentiated pricing model to take market share in \$100m US market

# Appendix

# Product Overview



## One hemodynamic monitor for the entire patient pathway

### LiDCO<sup>min-invasive</sup>

- ✓ Arterial line input
- ✓ Plug and play from existing vital signs monitor
- ✓ Validated PulseCO™ algorithm
- ✓ Beat-to-beat analysis and display of hemodynamic parameters



### LiDCO<sup>+calibrated</sup>

- ✓ Continuous real-time measurement with high precision
- ✓ Calibrate using LiDCO Lithium technology



### LiDCO<sup>non-invasive</sup>

- ✓ Quick and easy to set-up
- ✓ Real-time continuous non-invasive blood pressure (CNAP™) and hemodynamic parameters
- ✓ Dual finger cuff with automatic finger switching for safer non-invasive use



### Disposables

**Surgery disposables**  
SmartCard



**Critical Care disposables**  
Lithium calibration kits



# Improving patient outcomes



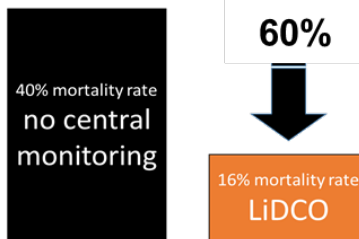
Independent studies using LiDCO technology have been shown to improve outcomes in:

**High risk elective surgery** →  
**Emergency surgery** →  
**Intensive Care** →

*Colorectal, Vascular, Hip replacement, Liver Resection, Oesophagectomy, Bariatric, Cardiac, Abdominal, Caesarean, Emergency Laparotomy*  
*High risk surgical patients in ICU, Septic shock patients in ICU*

## Reducing patient deaths

Using LiDCO in the management of **Sepsis** shock patients has been shown to statistically reduce mortality<sup>2</sup>



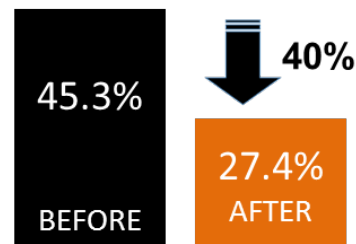
## Reducing length of stay

Using LiDCO as part of an Enhanced Recovery program in **Colorectal** surgery has been shown to statistically reduce length of stay (LOS)<sup>3</sup>



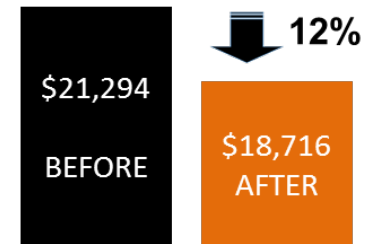
## Less complications

Using LiDCO for **Cardiac** surgery statistically reduced major postoperative complications<sup>4</sup>



## Cost savings

Using LiDCO as part of an Enhanced Recovery program in **Oncology** surgery has been shown to reduce overall hospital costs<sup>5</sup>

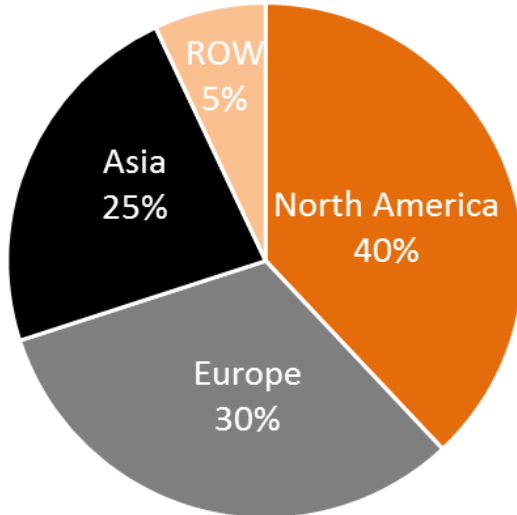


# Market Size



**Global Market estimated to be in excess of \$200 million p.a. with a total market being potentially \$2 billion p.a \***

**Current market is \$200m+ p.a**



- Hemodynamic monitoring well established in UK & Europe ahead of rest of the world
- USA recent growth driven by ERAS implementations
- Recent USA & European recommendations<sup>6 7</sup>

**Future market size driven by number of patients technology is applicable for**

## **UK Patient Numbers**

*Source: NHS data*

|                              |                                 |
|------------------------------|---------------------------------|
| High risk elective Surgery   | Over 75,000 patients per annum  |
| Emergency laparotomy Surgery | Over 30,000 patients per annum  |
| Cardiac Surgery              | Over 20,000 patients per annum  |
| Sepsis                       | Over 100,000 patients per annum |

**Enhanced Recovery After Surgery (ERAS) is an underpenetrated opportunity focused on reducing complications and length of stay**

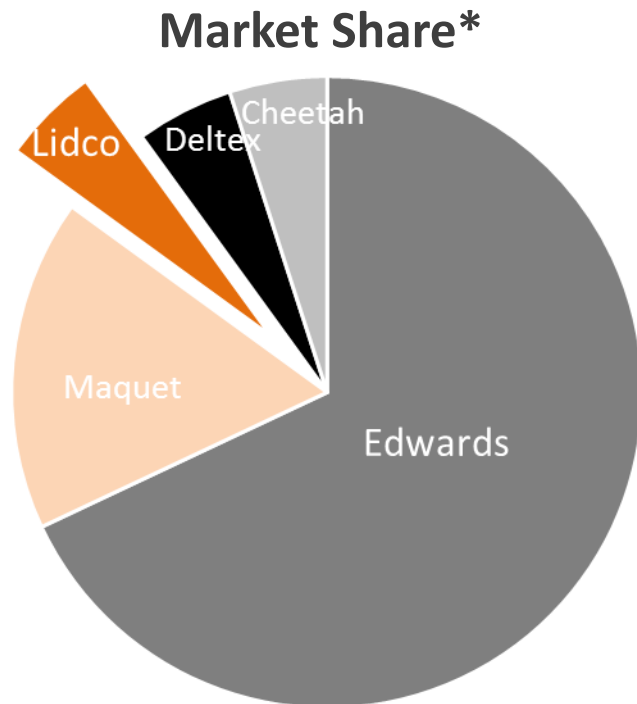
**Potentially a \$2billion market globally\***

*\* Source: internal estimates based on published data*

# Competitive landscape



Few competitors with one dominant global player who is investing in developing the market



*In 2014 Maquet acquired Pulsion for €139m representing 4 times revenues and 11 times EV/EBITDA*

## Offering

|         | Non-Invasive Monitoring | Minimally Invasive Monitoring | Calibrated Monitoring |
|---------|-------------------------|-------------------------------|-----------------------|
| LiDCO   | ✓                       | ✓                             | ✓                     |
| Edwards | ✓                       | ✓                             | ✓                     |
| Maquet  |                         | ✓                             | ✓                     |
| Deltex  |                         | ✓                             |                       |
| Cheetah | ✓                       |                               |                       |

## Pricing Models

- Monitors sold or placed
- Typical UK high risk surgery use 3-8 disposables per monitor per month



# Disposables Hemodynamic Market



## Addressable by LiDCO technology

| Peri-operative Surgical Fluid & Hemodynamic Monitoring Market |              |               |               |               |
|---|--------------|---------------|---------------|---------------|
| Territory   | UK           | US            | JAPAN         | EU            |
| Arterial line pts.  | 340,000      | 1,700,000     | 680,000       | 2,560,000     |
| Non arterial line pts   | 340,000      | 1,700,000     | 680,000       | 2,560,000     |
| Total pts. / annum  | 680,000      | 3,400,000     | 1,360,000     | 5,120,000     |
| Average price Disposable (\$)                                 | \$102        | \$195         | \$420         | \$150         |
| Disposable market value / annum                               | <b>\$70m</b> | <b>\$660m</b> | <b>\$570m</b> | <b>\$770m</b> |

Total potential market in excess of **\$2 billion**

Source: internal estimates based on published data

# Clinical References



- 1:** *Evaluation of the utility of the Vigileo FloTrac™, LiDCO™, USCOM and CardioQ™ to detect hypovolaemia in conscious volunteers: a proof of concept study. Reference: Anaesthesia 2015, 70, 142–149*
- 2:** *Hata J, Stotts C, Shelsky C, Bayman E, Frazier A, Wang J, Nickel E (2011) Reduced mortality with noninvasive hemodynamic monitoring of shock. J Crit Care vol 26 (2):224. E1-8*
- 3:** *Miller T, Thacker J, White W, Mantyh C, Migaly J, Jin J, Roche A, Eisenstein E, Edwards R, Anstrom K, Moon R, Gan TJ (2014) Anesth Analg 2014;118:1052–61*
- 4:** *Eduardo A. Osawa; Andrew Rhodes; Giovanni Landoni; Filomena R. B. G. Galas; Julia T. Fukushima, et al. Effect of Perioperative Goal-Directed Hemodynamic Resuscitation Therapy on Outcomes Following Cardiac Surgery: A Randomized Clinical Trial and Systematic Review General High Risk Surgery. Crit Care Med. 2016 Apr;44(4):724-33. doi: 10.1097/CCM.0000000000001479*
- 5:** *Fitzgerald T, Mosquera C, Koutlas N, Vohra N, Lee K, Zervos E. Enhanced recovery after surgery in a single high-volume surgical oncology unit: Details matter. Presented at the 11th Annual Academic Surgical Congress (ASC), Jacksonville, Florida, Feb 2016*
- 6:** *American Society for Enhanced Recovery (ASER) and Perioperative Quality Initiative (POQI) joint consensus statement on perioperative fluid management within an enhanced recovery pathway for colorectal surgery. Thiele et al. Perioperative Medicine (2016) 5:24 DOI 10.1186/s13741-016-0049-9*
- 7:** *Consensus on circulatory shock and hemodynamic monitoring. Task force of the European Society of Intensive Care Medicine. Cecconi et al. Intensive Care Med DOI 10.1007/s00134-014-3525-z*
- 8:** *NICE Medical technologies guidance [MTG3]. <https://www.nice.org.uk/guidance/mtg3/resources>*