

INTERIM REPORT 2 (2017-05-01 – 2017-10-31)

Phase Holographic Imaging PHI AB (publ)

December 18, 2017



AUGUST – OCTOBER 2017

Net sales	179 (890) TSEK
Operating result before depreciation (EBITDA)	-2 079 (-1 447) TSEK
Net result	-3 359 (-2 479) TSEK
Earnings per share	-0.29 (-0.21) SEK

MAY – OCTOBER 2017

Net sales	839 (1 722) TSEK
Operating result before depreciation (EBITDA)	-4 012 (-2 133) TSEK
Net result	-6 574 (-4 209) TSEK
Earnings per share	-0.57 (-0.36) SEK

IN SHORT

- The self-imposed reduction in marketing activities until early 2017, in combination with an average sales period of approximately 6 months, has strongly contributed to the low sales during the period.
- This spring's quotations are first now resulting in orders. Sales during November and early December amounts to 831 TSEK.
- The gross margin was 61 (47) % for the second quarter and 70 (45) % accumulated.
- PHI and Germany's federal institute for materials research have agreed to jointly enter the national phase of international patent application "Molecularly Imprinted Polymers" in Europe, USA, China and Japan. PHI acquired a 75 % ownership of the invention by compensating three of the inventors for accrued expenses.
- In September the HoloMonitor® Wound Healing Assay was launched. The assay meets the unmet market demand of both quantifying cell movement automatically and in great detail.
- Additional HoloMonitor units have been deployed at University of Bristol in United Kingdom, Chang Gung University in Taiwan, Queensland University of Technology in Australia and a 2nd unit at Korea Research Institute of Bioscience & Biotechnology.
- 29 scientific articles based on HoloMonitor have been published, since January 1, 2017, which is more than twice as many as in 2016, when 13 articles were published.

CEO COMMENTARY

We have previously touched upon that our extensive quality assurance efforts resulted in that our marketing activities were first intensified in early 2017. The until then self-imposed reduction in marketing activities, in combination with an average sales period of approximately 6 months, has strongly contributed to the low sales during the period. Fortunately, we now see that our intensified marketing activities are providing returns in that this spring's quotations now result in orders. Sales during November and early December amounts to 831 TSEK.

The rather long sales period is explained by that HoloMonitor is a new type of product, previously unknown to the customer. This results in that the time required to fund the purchase is included in the sales period. Commonly, this is not the case for established product types as the customer has planned and budgeted the purchase in advance.



We continue to expand the capabilities of HoloMonitor technology, without the cost and risk associated with developing, testing and manufacturing new hardware.

Notable recent customers are University of Bristol, Queensland University of Technology in Brisbane (see [New holographic microscope boosts QUT cancer research](#)) and Chang Gung University in Taiwan. It is also worth noting that Korea Research Institute of Bioscience & Biotechnology supplements their first unit with a second HoloMonitor unit. These orders continue to exhibit confidence in HoloMonitor technology. Additional endorsement of the success of HoloMonitor technology is reflected in the fact that 29 scientific articles based on the HoloMonitor have been published since January 1, 2017. By contrast, only 13 articles were published during all of 2016.

For the 4th consecutive year the International Society for Optics and Photonics (SPIE) will host a 3-day conference entirely dedicated to holographic microscopy at the largest event for biomedical optics in the world, [SPIE BIOS](#). Scientists from our partners – Boston Children's Hospital, Northeastern University in Boston and University of California, San Francisco – have been invited to present their HoloMonitor-based research. PHI has also been invited to speak about the rewards and challenges of commercializing this game changing microscopy technology. The conference program is available [here](#).

The gross margin has improved as anticipated to a healthy 61 (47) % for the 2nd quarter and 70 (45) % accumulated. This margin improvement was realized by lower production costs in serial production. We expect the gross margin to be maintained at 60 – 70 % for the remainder of the fiscal year.

We continue to invest significantly in sales & marketing, but also in software development and strategic partnerships. As HoloMonitor now is manufactured in serial production, hardware development has transitioned to less resource demanding product maintenance.

TECHNOLOGY ADVANCEMENTS

Wound healing assay

The software-based wound healing assay we launched in September takes automated wound healing assays to the next level, as it also allows individual cells to be tracked and quantified in great detail. This new and unique capability is tremendously important. Cancer researchers extensively use wound healing assays to measure cancer cells ability to form metastases in a laboratory environment. Previously it was believed that all tumor cells had the same capacity to form metastases. New research strongly indicates that only a few so-called cancer stem cells are capable of forming

metastases. Consequently, cancer researchers are moving away from the methods which only can provide population data, in favor of methods also providing information about each and every cell in a cell population. The [IncuCyte instrument](#) from Sartorius (previously from Essen Bioscience) which for the moment dominates the market for automated wound healing assays is based on conventional microscopy. This results in that the IncuCyte assay is limited to provide only population data and no individual cell information of, for example, cancer stem cells.

Combining fluorescence and holographics

Fluorescent microscopy is the most widely used method to characterize cells in life science research. Our drive to combine the power of fluorescence and holographics in response to market demand has been a core focus. The solution, as it turns out, is more elegant and simple than originally thought.

Initially we envisioned that the combination of fluorescence and holographics would require a full hardware redesign in what we called HoloMonitor M5. Fortunately, however, it is now clear that this application can be satisfied by importing images from an existing fluorescence microscope into the HoloMonitor software, which identifies each individual cell in both imaging modalities. Vital information can then be extracted for each cell by using both imaging technologies. This significant advancement makes it possible for customers to combine the imaging technologies with existing HoloMonitor M4 hardware by simply purchasing additional HoloMonitor software.

CENTERS OF EXCELLENCE

Our Centers of Excellence program continues to pay dividends. These now well-established collaborations have significantly contributed to the dramatic increase in scientific publications during 2017. Negotiations for the establishment of additional centers are well underway and we anticipate that we will announce several additional Centers of Excellence in the near future.

With our wound healing assay, fluorescence capability and the other software assays under development, we continue to expand the capabilities and market potential of HoloMonitor technology, without the cost and risk associated with developing, testing and manufacturing new hardware. This will only increase the interest by world leading institutions and major industry players.



Peter Egelberg
Peter Egelberg, CEO

NET SALES AND RESULT

Net sales for the second quarter amounted to 179 (890) TSEK and operating result before depreciation (EBITDA) to -2 079 (-1 447) TSEK. Net result amounted to -3 359 (-2 479) TSEK.

The gross margin amounted to 61 (47) % for the quarter and 70 (45) % year to date. The improved margin is due to a significant proportion of direct sales and lower product costs.

Overhead costs increased as a result of intensified product development and marketing, compared to previous year. The change in R&D expenses (see income statement) is associated with intensified software development, a larger proportion of direct costing and increased depreciation.

INVESTMENTS

During the second quarter, the Company invested 1 473 (1 546) TSEK in product, production and application development. The focus is now on application development to further expand and streamline the use of the Company's products.

FINANCING

Cash, cash equivalents and unutilized granted credits amounted to 13 546 (24 594) TSEK by the end of the period. The equity ratio was 71 (81) %. Through exercise of options, equity increased by 370 TSEK during the quarter.

OPTION PROGRAMS

The two option programs of the Company both had a final subscription date of October 24, 2017. By then remaining options, corresponding to 131 532 shares, have been subscribed for. However, the process of exercising these remaining options have not yet been fully completed due to banking issues. Swedish banks have regrettably become increasingly reluctant to handle transactions by U.S citizens, as more stringent U.S. regulations force Swedish banks to report directly to the U.S. tax authorities.

RISKS

The Company may be affected by various factors, described in the 2016/17 annual report. These factors may individually or jointly increase risks for the operation and result of the Company.

ACCOUNTING PRINCIPLES

The accounts are prepared in accordance with the Annual Accounts Act and general advice from the Swedish Accounting Standards Board BFNAR 2012:1 Annual accounts and consolidated accounts (K3).

REVIEW

This interim report has not been subject to review by the auditors of the Company.

The information is such that Phase Holographic Imaging PHI AB (publ) is obligated to disclose pursuant to the Swedish Securities Market Act and/or the Financial Instruments Trading Act.

STATEMENTS ABOUT THE FUTURE

Statements concerning the Company's business environment and the future in this report reflect the board of director's current view of future events and financial developments. Forward-looking statements only express the judgments and assumptions made by the board of directors on the day of the report. These statements have been carefully assessed. However, it is brought to the reader's attention that these statements are associated with an uncertainty, as all statements about the future.

CALENDAR

- March 12, 2018 Q3 report, 2017/18

ABOUT PHASE HOLOGRAPHIC IMAGING

Phase Holographic Imaging (PHI) leads the ground-breaking development of time-lapse cytometry instrumentation and software. With the first HoloMonitor-instrument introduced in 2011, the Company today offers a range of products for long-term quantitative analysis of living cell dynamics that circumvent the drawbacks of traditional methods requiring toxic stains. Headquartered in Lund, Sweden, PHI trades through a network of international distributors. Committed to promoting the science and practice of time-lapse cytometry, PHI is actively expanding its customer base and scientific collaborations in cancer research, inflammatory and autoimmune diseases, stem cell biology, gene therapy, regenerative medicine and toxicological studies.

On behalf of the Board of Directors
Peter Egelberg, CEO

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INCOME STATEMENT (TSEK)

	Q2	Q2	YTD	YTD	FY
	2017/18	2016/17	2017/18	2016/17	2016/17
Net sales	179	890	839	1 722	4 127
Cost of products sold	-70	-475	-253	-954	-1 994
Gross profit	109	415	586	768	2 133
<i>Gross margin</i>	61 %	47 %	70 %	45 %	52 %
Selling expenses	-651	-461	-1 389	-989	-2 685
Administrative expenses	-929	-1 184	-2 110	-2 250	-4 155
R&D expenses*	-1 821	-1 178	-3 526	-1 593	-5 408
Operating result	-3 292	-2 408	-6 439	-4 064	-10 115
<i>(Operating result before depreciation)</i>	-2 079	-1 447	-4 012	-2 133	-6 039
Financial net	-67	-71	-135	-145	-301
Result before tax	-3 359	-2 479	-6 574	-4 209	-10 416
Net result	-3 359	-2 479	-6 574	-4 209	-10 416

BALANCE SHEET (TSEK)

	2017-10-31	2016-10-31	2017-10-31	2016-10-31	2017-04-30
ASSETS					
<i>Non-current assets</i>					
Intangible assets	21 671	19 807	21 671	19 807	21 306
Tangible assets	691	74	691	74	633
Total non-current assets	22 362	19 881	22 362	19 881	21 939
<i>Current assets</i>					
Inventory	1 616	1 588	1 616	1 588	1 283
Current receivables	987	1 496	987	1 496	1 831
Cash & equivalents	11 546	22 594	11 546	22 594	18 452
Total current assets	14 149	25 678	14 149	25 678	21 566
<i>(Cash & equivalents incl. unutilized credits)</i>	<i>13 546</i>	<i>24 594</i>	<i>13 546</i>	<i>24 594</i>	<i>20 452</i>
Total assets	36 511	45 559	36 511	45 559	43 505
EQUITY AND LIABILITIES					
Equity	25 840	36 997	25 840	36 997	31 162
Financial liabilities	5 625	6 000	5 625	6 000	6 000
Operating liabilities	5 046	2 562	5 046	2 562	6 343
Total equity and liabilities	35 511	45 559	35 511	45 559	43 505

CHANGES IN EQUITY (TSEK)

	Q2 2017/18	Q2 2016/17	YTD 2017/18	YTD 2016/17	FY 2016/17
Opening balance	28 829	39 476	31 162	41 206	41 206
Equity issues, net	370	-	1 252	-	372
Net profit	-3 359	-2 479	-6 574	-4 209	-10 416
Closing balance	25 840	36 997	25 840	36 997	31 162
Equity ratio	71 %	81 %	71 %	81 %	72 %

CASH FLOW STATEMENT (TSEK)

	Q2 2017/18	Q2 2016/17	YTD 2017/18	YTD 2016/17	FY 2016/17
<i>Operating activities</i>					
Net result	-3 359	-2 479	-6 574	-4 209	-10 416
Depreciation	1 213	961	2 427	1 931	4 076
Operating cash flow	-2 146	-1 518	-4 147	-2 278	-6 340
Incr. (-)/decr. (+) in inventories	-799	-239	-333	-407	-102
Incr. (-)/decr. (+) in current receivables	153	64	844	230	-105
Incr. (+)/decr. (-) in operating liabilities	499	-1 261	-1 296	-1 007	2 774
Change in working capital	-147	-1 436	-785	-1 184	2 567
Cash flow from operating activities	-2 293	-2 954	-4 932	-3 462	-3 773
<i>Investing activities</i>					
Capitalized development expenditure	-1 473	-1 546	-2 712	-3 410	-6 807
Patents and trademarks	-	-	-	-	-237
Machinery and equipment	-	-	-139	-	-569
Cash flow after investments	-3 766	-4 500	-7 783	-6 872	-11 386
<i>Financing activities</i>					
Equity issues, net	370	-	1 252	-	372
Incr. (+)/decr. (-) in financial liabilities	-375	-48	-375	-119	-119
Cash flow from financing activities	-5	-48	877	-119	253
Cash flow for the period	-3 771	-4 548	-6 906	-6 991	-11 133
Cash and equiv, beginning of period	15 317	27 142	18 452	29 585	29 585
Cash and equivalents, end of period	11 546	22 594	11 546	22 594	18 452
<i>(Incl. unutilized share of granted credits)</i>	<i>13 546</i>	<i>24 594</i>	<i>13 546</i>	<i>24 594</i>	<i>20 452</i>

DATA PER SHARE

	Q2 2017/18	Q2 2016/17	YTD 2017/18	YTD 2016/17	FY 2016/17
Earnings per share (SEK)	-0.29	-0.21	-0.57	-0.36	-0.90
Equity per share (SEK)	2.21	3.20	2.21	3.20	2.69
Number of shares, end of period	11 670 088	11 549 455	11 670 088	11 549 455	11 576 939
Average number of shares	11 655 091	11 549 455	11 630 313	11 549 455	11 552 542
Share price, end of period	40.90	22.70	40.90	22.70	30.30