

REACHING MORE PATIENTS

PROTECT +
ENHANCE +
SAVE LIVES



IBA's Mission

TO DEVELOP CUTTING-EDGE TECHNOLOGY IN THE FIGHT AGAINST CANCER

IBA is the world leader in cutting-edge technology as applied to radiotherapy treatment and the diagnosis of cancer. With unique expertise in the field of innovative proton therapy technology, we design equipment of unrivalled precision for the world of oncology.

We share our ideas and know-how with our clients and stakeholders for the purpose of developing new solutions.

We care for the welfare of patients, our employees, the Company, the planet and our shareholders alike, because it is they who make it possible for us to fulfill our mission to Protect, Enhance and Save Lives.



The Skandionkliniken proton therapy center in Uppsala, Sweden,
Image: with courtesy of Skandionkliniken.

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IBA at a glance



PROTON THERAPY

Proton therapy is considered to be the most advanced form of radiotherapy in the fight against cancer. The unique dose deposition that proton therapy offers enables the tumor to be targeted more effectively than other treatments. Compared to photon radiotherapy, protons deposit almost all their energy within a controlled zone and, in the vast majority of cases, limit the amount of the dose deposited in the healthy tissue surrounding the tumor. The use of protons consequently offers the potential to reduce the secondary effects of the treatment.



DOSIMETRY

In both radiotherapy and radiology, precision and dose control are fundamental requirements. That is why it is absolutely crucial to release the prescribed dose within a precisely defined area of patients' bodies, their safety and successful treatment being at stake. IBA offers hospitals a full range of monitoring equipment and software to safeguard the reliability of procedures and instrument calibration.



PARTICLE ACCELERATORS

Currently, IBA has installed more than 450 accelerators worldwide. Most of them are used to produce radio isotopes for oncological (detection of cancer), neurological and cardiological diagnosis. In addition to this medical activity, IBA leverages on its scientific expertise in the field of radiation to develop solutions for sterilization and ionization in a variety of industrial applications.

Message from Olivier Legrain

While 2016 saw a combination of several favorable factors, 2017 was more difficult, with a downturn in our turnover and our operating margin. We took a number of measures to return to profitability in 2018 while continuing to contribute to the interests of our clients, patients, employees, society and our shareholders.

The slowdown in the proton therapy market and the delays of some clients in constructing their buildings impacted our results in 2017. This market is distinctive as it has very long sales, installation and revenue recognition cycles, spread over 3 or 4 years. In the longer term, we have no doubt as to the promising development of proton therapy as a modality of choice in treating cancer. The body of evidence for proton therapy is growing with 629 proton therapy publications published in 2017 and a total of 160 trials active.

Our position as market leader places us ideally to take advantage from this development. We remain confident in our long-term growth potential. Proton therapy has great potential for the treatment of numerous cancers.

IBA is making every effort to realize the clinical potential of proton therapy. Firstly, IBA is growing the market by encouraging the adoption of proton therapy and the recognition of its clinical benefits. We do this by training and helping to create a solid set of data supporting proton therapy. Secondly, IBA is working to increasing our market share by providing the most innovative solutions, the fastest project execution, and a proven ability to upgrade current systems and best system reliability, supported by our global network of best-in-class partners.

Our main asset, however, is our workforce. As well as being experts in their fields, the current situation enables us to see the commitment of our employees to the company's mission and values.

We are optimistic for 2018. The innovations developed in each of our activities are already bearing fruit. Dosimetry achieved very good results in 2017. With the new Cyclone®KIUBE cyclotron, IBA RadioPharma Solutions has demonstrated its technical superiority and enabled the division to

increase its market share. As for the Industrial Solutions division, the launch of the new generation of Rhodotron® promises to attract substantial orders, with several sales already made.

Finally, the proton therapy market growth is remaining stable over time. With the best proton therapy offer on the market, we have competitive advantages, a solid backlog and a strategy to continue to profitably capture projected market growth over the long-term.



||| *We are working to increase our market share by providing the most innovative solutions, the fastest project execution, and a proven ability to upgrade current systems and improve their reliability.* |||

Olivier Legrain
Chief Executive Officer

Proton Therapy

PROTON THERAPY IS CONSIDERED TO BE THE MOST ADVANCED FORM OF RADIOTHERAPY TREATMENT AVAILABLE

The two main types of treatment used in the fight against cancer are: systemic – namely chemotherapy and immunology – both of which seek to destroy cancerous cells in the body, and localized - which seek to destroy a tumor located in a specific part of the body. Today, more than half the patients suffering from cancer receive doses of radiation as part of their treatment. At present, proton therapy is considered as the most advanced form of radiotherapy. Protons have the physical property of being able to deposit most of their energy within a strictly controlled area, inside the tumor, whilst limiting the doses delivered to the surrounding healthy tissue.



Systemic Treatments

Chemotherapy, Immunotherapy,
Targeted Therapy



Medication, stem cell infiltration /
Destruction of cancerous cells

Localized Treatments

Surgery



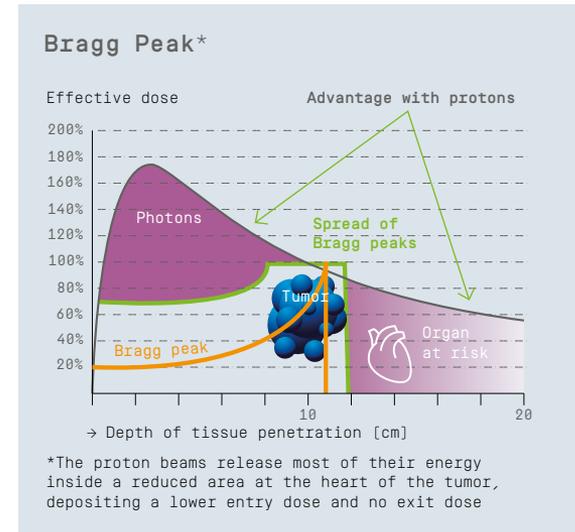
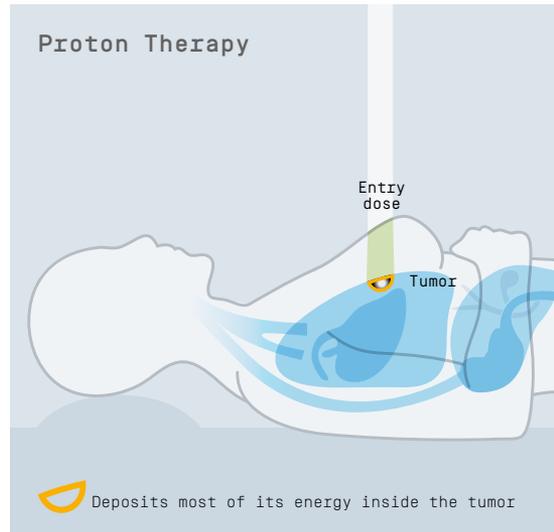
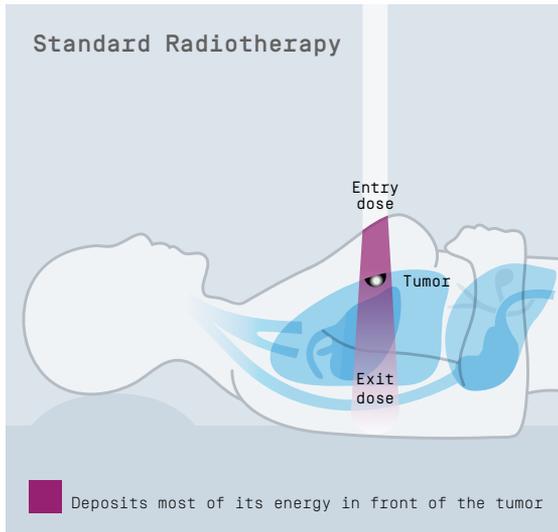
Invasive treatment /
Ablation of the tumor

Radiotherapy



Photon Radiotherapy
[standard]
Proton Therapy
Brachytherapy

Non-invasive treatment [photons and
protons] / Destruction of the tumor



The Bragg Peak diagram shows that protons deliver the prescribed dose to the heart of the tumor. The dose deposited in front of the tumor is lower than the dose delivered by radiotherapy with photons. Behind the tumor, protons deposit no dosage. Higher doses can be deposited inside the tumor, without increasing the risk of side effects or long-term complications, which may improve the outcome of the treatment and a patient's quality of life.

Well-known medical doctors and physicians are working to extend the clinical application of proton therapy. For example, the value of this treatment modality for pediatric cancers is widely recognized. The medical community is currently assessing how this technology could also benefit more adult patients.

➤ IBA is a proton therapy pioneer

THE POTENTIAL ADVANTAGES OF PROTON THERAPY

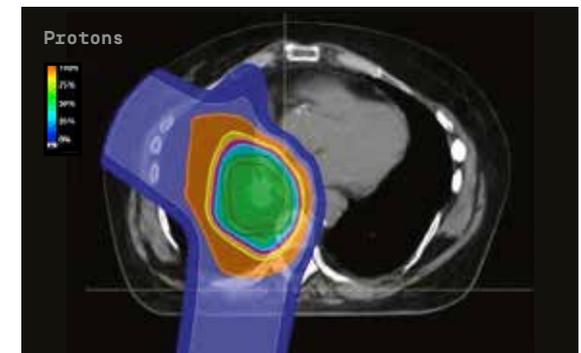
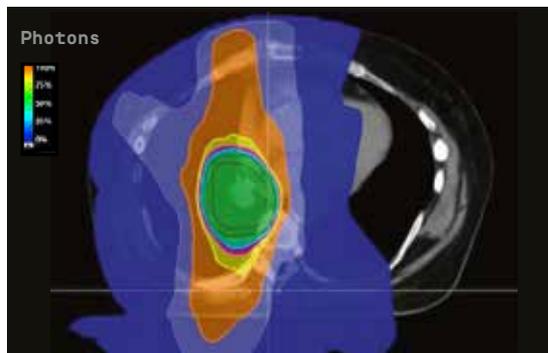
- **A more effective treatment** due to the increased dose deposited inside the tumor and the radio-biological effect of protons, which is superior to that of photons
- **A reduction of side-effects** thanks to a lower dose deposited in healthy tissue, which can contribute to preserving the quality of life of a patient both during and after treatment
- **A reduce risk of secondary cancers** and other long-term complications because proton therapy reduces the dose deposited in healthy tissue
- A preferred solution **for retreatments**

Proton therapy is currently being used to treat numerous types of cancer. It is proving to be a particularly appropriate treatment when options are limited and standard radiotherapy presents unacceptable risks for the patient. This applies in particular to ocular and brain cancers, cancers of the head and neck, complex prostate cancer, cancer of the liver, lung and left breast, pediatric cancers, and also tumors located close to one or more vital organs.

An increasing number of studies show that, in addition to its benefits and physical properties, proton therapy is also a more cost-effective, long-term treatment for certain clinical indications when patients are selected in an appropriate manner.

Unfortunately, at present, too few patients are benefiting from this treatment. In fact, less than 1% of those receiving radiotherapy currently have access to it.

➤ Proton therapy can improve the quality of life of patients both during and after treatment



With courtesy of the Seattle Cancer Care Alliance Proton Therapy Center - "Non-small cell" lung cancer



||| *Proton therapy made sense for me as it would allow me to keep a high quality of life after my treatment.* |||

Samantha Williams
Treated with proton therapy in 2015

A NEW ERA FOR PROTON THERAPY TREATMENT

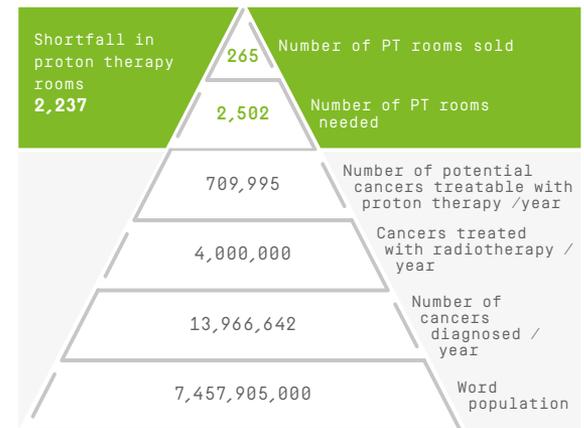
More and more clinical trials and studies are on going to evaluate the clinical benefit of proton therapy compared to standard radiotherapy. Dutch "Horizon scanning report*" results extrapolation to the world population shows that at least 17.7% of the patients treated with radiotherapy could have benefited from proton therapy, whereas less than 1% are currently doing so.

When this proportion of 17.7% is extrapolated to the world population, it can be seen that there would be a need for more than 2 500 proton therapy rooms worldwide, whereas only 265 have currently been sold.

In order to increase the use of proton therapy, IBA is developing new solutions and more affordable technologies. These developments will determine the future of applications for proton therapy treatments and will undoubtedly open the doors to a new era.

In 2017, the American Society for Radiation Oncology (ASTRO) and the National Comprehensive Cancer Network (NCCN) expanded their indication policies for proton therapy, leading to greater penetration of the market for proton therapy in the US. The guidelines further endorse proton therapy as a treatment option in some clinical conditions.

Estimated number of proton therapy rooms needed worldwide

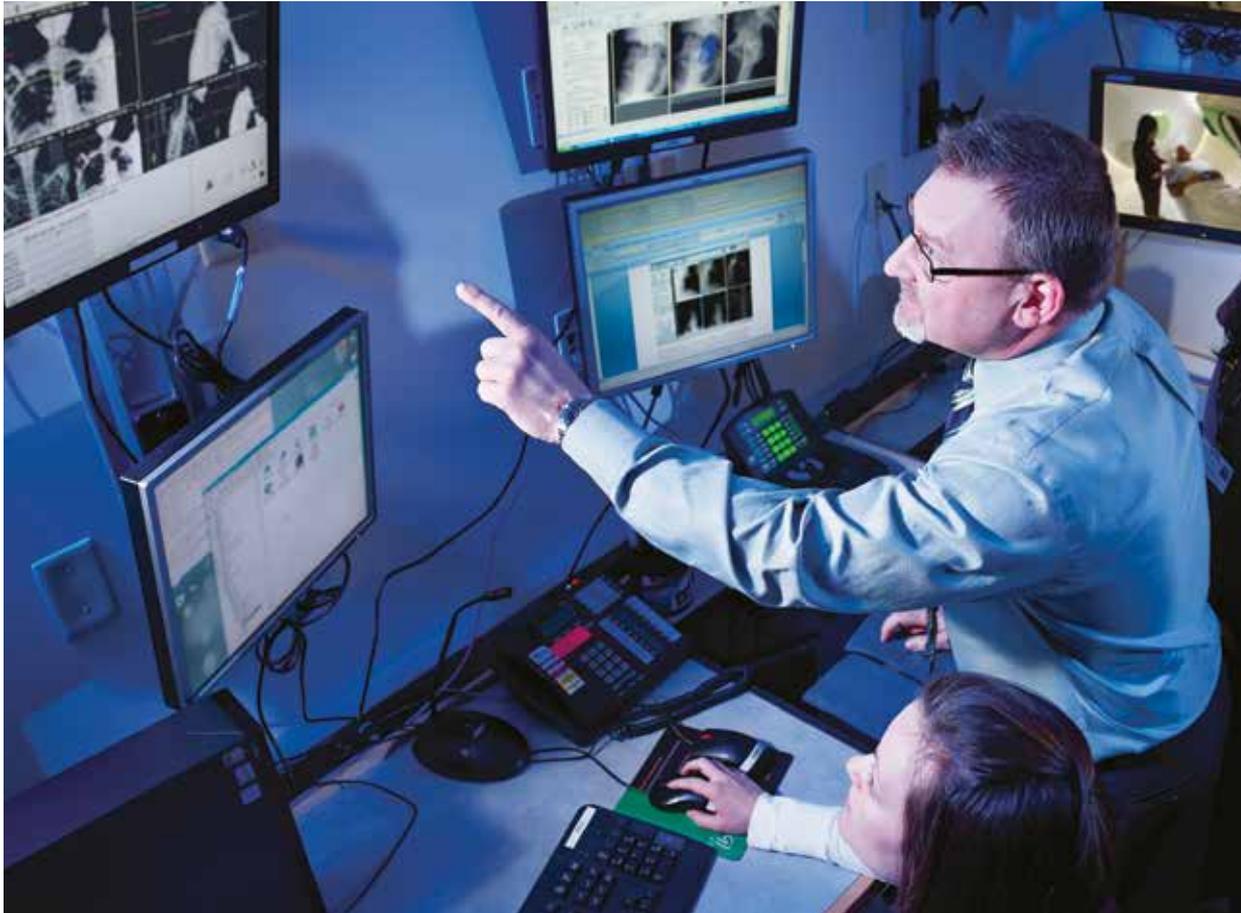


Projection based on the Nederlands Gezondheidsraad report and Globocan2012 data

➤ In the United States, 23% of patients receiving radiotherapy are given proton therapy treatment in centers using both photon and proton technologies

Source: Alcimed 2017 report.

*Netherlands. Proton radiotherapy. Horizon scanning report. Publication n° 2009/17E. ISBN 978-90-5549-786-7. www.gezondheidsraad.nl



I already see a difference today from what was accepted five years ago. I think proton therapy will be more widely accepted for a larger number of treatments within the next few years. Additionally, when we think about the potential for combining proton therapy with other techniques such as chemotherapy or immunotherapy, it is clear that proton therapy will have an even more important role to play in the treatment of cancer.



James M Metz
Chair of Penn Medicine Department
of Radiation Oncology
Executive Director, OncoLink,
Philadelphia, Pennsylvania,
United States

RECOGNITION OF THE CLINICAL ADVANTAGES OF PROTON THERAPY

As the number of patients being treated with proton therapy continues to grow, awareness of the effectiveness of the technology is also increasing among members of the medical profession. This awareness is reflected in the increase in clinical data available. In 2017, more than 629 scientific articles were published.

Clinical trials are also contributing toward the increased use of proton therapy for a growing number of different types of cancer. As of the end of 2017, 160 trials were ongoing.

Interest in proton therapy has been increasing exponentially since the year 2000, as evidenced by the growing number of centers treating patients worldwide.

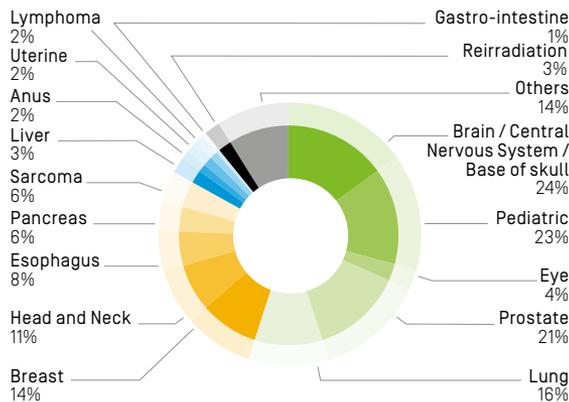
629

Scientific articles published in 2017

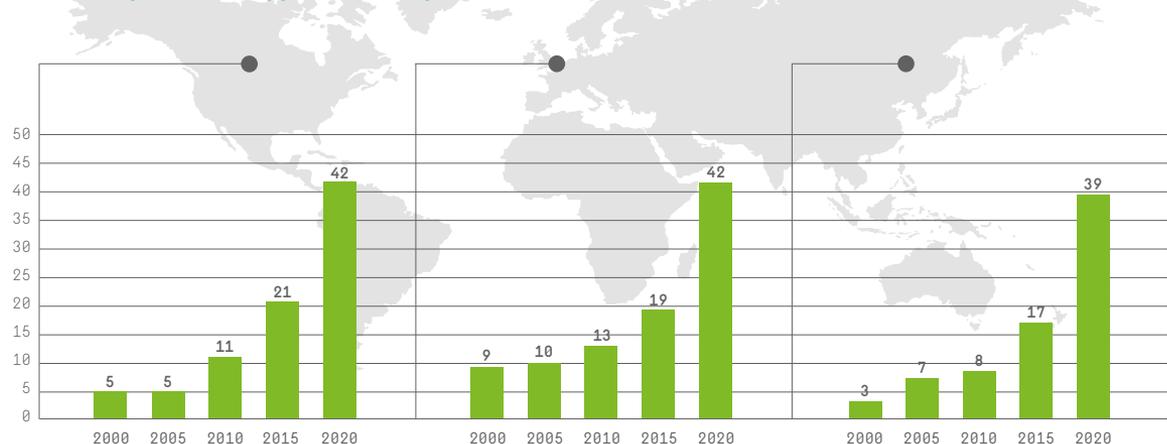
66

Academic and business center in operation at the end of 2017

Types of cancer for which clinical trials using proton therapy treatment are being conducted



Number of proton therapy centers in operation between 2000 and 2020*



Source: <https://clinicaltrials.gov/>

*Academic and business centers. Source: PTCOG 2017



IBA DRIVES TO AN APPROPRIATE ADOPTION OF PROTON THERAPY

In support of the adoption of proton therapy, IBA is taking the initiative of promoting its use in various groups of interest:

Radiotherapy Professionals

IBA organizes several annual events dedicated to radiotherapy practitioners. The “IBA Proteus User Meeting” brings together all its customers with the aim of working together to encourage the future use of proton therapy. IBA also arranges symposiums for radiotherapy professionals during the course of scientific meetings and similar events.

In parallel with this, the company publishes a collection of white papers, each dedicated to a specific indication. Regularly supplemented and updated, these works focus on current practices as well as the opportunities and challenges of proton therapy as applied to oncology.

Oncology Community

IBA collaborates with more than 90 clinical institutions and research laboratories. It also encourages reflection by organizing “focus groups” that bring together world experts from the five different specializations. The aim is to exchange information and reach a multidisciplinary consensus on the role of proton therapy.

Patients

IBA is committed to several initiatives towards patients because they are of primary concern. For example, it has set up a website* to inform them about proton therapy and the various steps they should take in order to benefit from this type of treatment when appropriate. The company sponsors associations such as the Compass to Care Childhood Foundation, which helps children in the United States by providing them with transport to take them from their home to the proton therapy center. It also supports the “Alliance for Proton Therapy Access”, which acts on behalf of patients enabling them to obtain fair and rapid decisions with regard to the reimbursement of medical expenses by health-care insurance providers.

*<https://iba-worldwide.com/proton-therapy/for-patients>

IBA DRIVES INNOVATION

The Pencil Beam Scanning (PBS) and Cone Beam Computed Tomography (CBCT) have enabled proton therapy to be used for a greater number of clinical indications.

Within IBA itself, the Product Management Department, made up of experienced medical physicists, together with the Research Department, carry out work leading to the identification and development of innovations to improve the clinical application of proton therapy. The free access website “OpenPath”, created by IBA, also encourages innovation and collaboration between researchers. This internal and external exchange of information will contribute towards a continued increase in the number of clinical indications being treated by proton therapy.

IBA is strongly committed to remaining at the forefront of innovation. It is making a major contribution towards obtaining recognition of proton therapy as a preferred technology for use in precise and quality treatments within the context of a personalized medical approach.

1. More precise treatment

THE TREATMENT OF MOBILE TUMORS

In proton therapy, motion management needs specific attention due to the possible interplay between the

tumor motion and the time structure of the proton beam delivery. IBA’s current solution is to employ a range of varied counter-measures to enable clinical teams to adapt treatment to an individual patient’s condition. The company is currently studying additional imaging tools to improve this process. IBA develops a volumetric imagery technique that takes account of the temporal dimension (4D-CBCT) in order to assess to the motion pattern of the tumor during the treatment. The aim is to enable clinicians to ensure that assumptions made during the treatment planning stage remain valid for each fraction of the dose delivered to the patient.

THE VERIFICATION OF THE DELIVERED DOSE

IBA’s developments are intended to reassure clinicians of the precise location where the dose delivered to the patient’s body should stop. In collaboration with the Carl Gustav Carus university clinic in Dresden (Germany), and the University of Pennsylvania (United States), IBA is developing a “Prompt Gamma” camera. This research tool should make possible the in vivo verification of the range reached by the proton beam and could be used as a quality control measure for the accurate delivery of the dose to the patient.

IBA and the proton therapy center at the Carl Gustav Carus university clinic in Dresden have also started work on a research program involving

the combination of magnetic resonance imaging and proton therapy (MR-PT). This innovation should offer the advantage of obtaining imagery of superior quality without using ionizing rays. MR-PT and 4D-CBCT will contribute to a more precise treatment for patients.

IBA and the Beaumont Proton Therapy Center are currently collaborating on a research project that seeks to develop a new method of delivering the proton beam delivery, similar to arc therapy: namely “proton arc therapy”. Delivered from several different angles, the dose can be more conformal to the tumor and be reduced in vital organs. The initial results show that “proton arc therapy” can plan treatment with the same conformity as IMPT plans, but with the possibility of either reducing

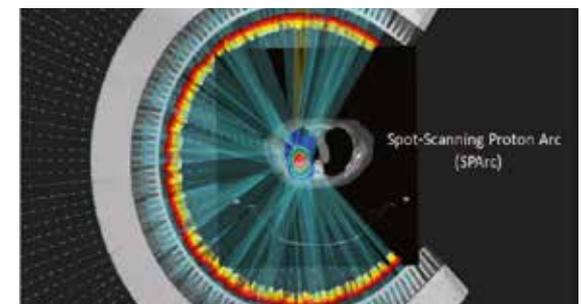


Illustration Proton arc therapy
Source: <https://www.ncbi.nlm.nih.gov/pubmed/27869883>

the treatment margins or further reducing the dose delivered to healthy tissue.

THE ADAPTATION OF TREATMENTS

A patient's body and the tumor can change along the treatment. The "OpenPath" research program enables researchers to upload and reuse clinical indicator test results to facilitate the re-planning of a treatment and even automate it.

The software integration work being done with Raysearch, Elekta and Philips will also make it easier to adapt treatments in the clinical environment. In addition, IBA has launched a research project with a view to finding an integrated quality assurance solution for patients. Clients will be able to introduce it automatically, using data obtained directly from the proton therapy system. In that way, the medical team, when necessary, will be able to rapidly adapt the treatment of a patient's tumor.

2. Towards personalized medicine

Evidence-based medicine is rapidly giving rise to new forms of precision treatment. This seeks to identify the most effective therapeutic approach for patients based on their individual parameters.

In order to set proton therapy on a path towards personalized medicine, innovation aimed at defining and validating predictive models is of



paramount importance. Relying on this information and exhaustive clinical databases, it will soon be possible to identify the typologies of patients who would benefit the most from the clinical benefits of proton therapy, and hence to better direct clinical indications.



The moving-target project team leaders reported impressive results in terms of treatment feasibility and efficacy. We are proud to translate research projects in a clinical benefit for our patients.



Dr. Maurizio Amichetti,
MD, Clinical Director
Proton Therapy Center in Trento, Italy

IBA DRIVES ACCESSIBILITY TO PROTON THERAPY

IBA has invested heavily in research and development aimed at minimizing the costs of proton therapy and making it more accessible to cancer patients.

In terms of that aim, IBA's Proteus[®]ONE represents a compact single room solution. More affordable, it is also easier to install, operate and finance.

Proteus[®]ONE incorporates the most advanced technology: namely image-guided proton therapy. This combines precision of the dose, using Pencil Beam Scanning (PBS) technology, with the three-dimensional precision of Cone Beam Computed Tomography (CBCT), thus enabling medical practitioners to more accurately localize the volumetric space to be treated and within which the protons will target the cancerous cells.

Thanks to Proteus[®]ONE, proton therapy is becoming accessible to an increasing number of patients worldwide. Interest in this compact solution is also growing rapidly.

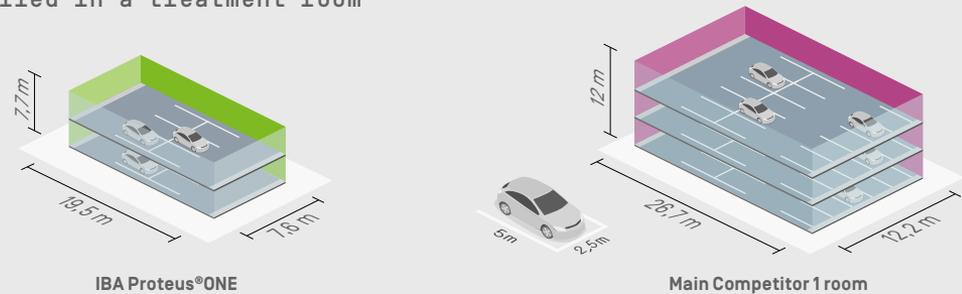
Footprint area required by Proteus[®]ONE compared to its main competitor

-200%

Volume required by Proteus[®]ONE compared to its main competitor

-300%

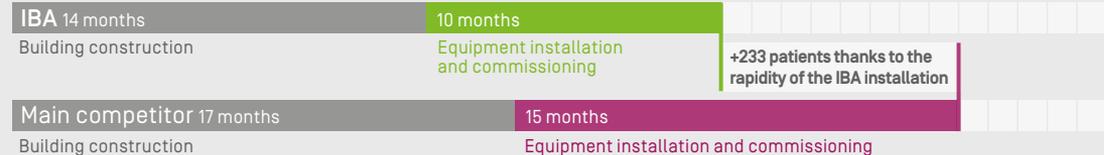
Illustration of the amount of space needed for proton therapy systems installed in a treatment room



Potential number of additional patients due to shorter construction and installation time [based on considering an average of 280 patients treated per room per year]

+233

Comparison of construction times from start of work until treatment of the first patient.



*Proteus[®]ONE is a Proteus[®] 235 registered trademark

RECORD IN INSTALLATION OF A PROTON THERAPY SYSTEM

IBA holds the record for the shortest time taken in the industry to install a proton therapy center. The faster a center is installed, the sooner patients can be treated and benefit from the oncological care they need. IBA has demonstrated several times its ability to install the first treatment rooms for its Proteus®PLUS and Proteus®ONE solutions in less than 12 months.

IBA was very helpful in meeting our tight time requirements. In fact, by working extra shifts in parallel with our Beaumont team we were able to combine some of the acceptance testing and commissioning. This reduced a typical 16 week process down to 7. We could not have met our timelines without IBA's commitment to our partnership.

MD Craig W. Stevens, PhD
Royal Oak, MI, United States



Proteus®ONE solution, installed in the proton therapy center in Beaumont, MI, United States, has been treating patients since 14 July 2017

**Proteus®PLUS is a Proteus® 235 registered trademark*

IBA DRIVES STRATEGIC PARTNERSHIPS

A world leader in proton therapy, IBA is developing numerous partnerships with the aim of making its solutions more competitive and accessible for its clients and beneficial for their patients.

The main areas in which these partnerships are active are:

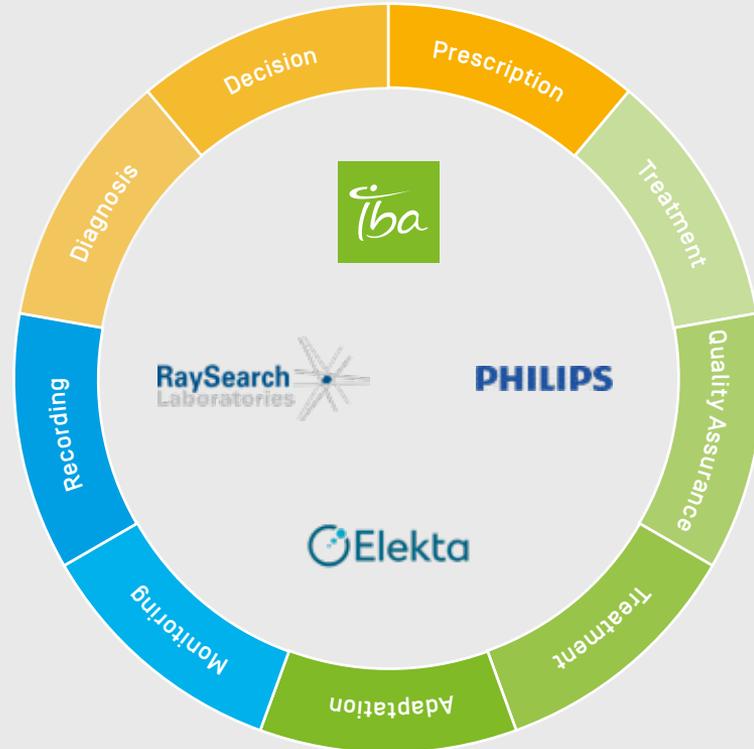
Integration of software and imaging solutions

A cutting-edge treatment like proton therapy demands great precision in the alignment of patients and constant monitoring of the development of the tumor during the treatment. The current technologies enable IBA to provide an adaptive treatment in which the tumor is constantly monitored and the treatment adapted accordingly.

By intelligently integrating the most advanced capabilities of partners such as Elekta, Philips and RaySearch, IBA can leverage their IT developments in imagery and conventional radiotherapy to offer the most sophisticated treatment.

This software integration results in unequalled performances in terms of quality of treatment functionality, workflow and automation.

Flow-chart of patient treatment events



Extension of the sales network

In regard to its international development, IBA has established several collaborations with major companies like Philips, Elekta and Canon Medical.

As part of the collaboration agreement with IBA, Philips includes a proton therapy offer in its catalogue on selected markets.

IBA has also signed a memorandum of understanding with Elekta, a world leader in the radiotherapy market, to collaborate on, among other things, the sale and marketing of their respective products. This partnership is intended to provide a solution that combines conventional radiotherapy and proton therapy. It is aimed at the major radiotherapy centers that would like to have both technologies and offer a full range of treatment methods, including proton therapy and the entire spectrum of conventional radiotherapy.

Construction program

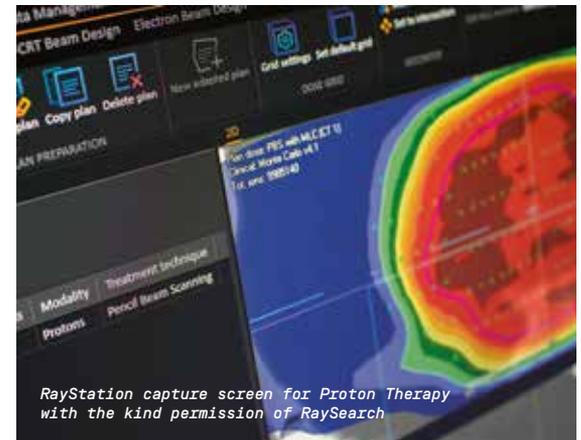
The design of a building is a key stage in the construction program for a proton therapy center. IBA is currently collaborating with several companies, one of which is Vinci Construction, a world leader in the construction industry.

These collaborations enable IBA's customers to work together with developers to ensure that buildings are delivered by the specified timelines and constructed in line with customer's requirements and in compliance with IBA's quality standards.

Patient's wellbeing

Philips Ambient is a patient-focused solution developed by Philips. IBA has incorporated it into the Proteus®PLUS and Proteus®ONE solutions, providing patients with the option of choosing the atmosphere in the room where they will receive their treatment.

The Ambient experience produces a more relaxed atmosphere, relieving stress for the patient as well as the medical team. As a result, it enables the flow of patients through the treatment room to be optimized.



IBA DRIVES THE PROTON THERAPY MARKET

Proton therapy is the company's main source of growth, particularly since it enjoys an undisputed position as world market leader.

In 2017, after a period of very strong growth, market demand slowed. This trend, added to an increase in competition, has slowed down the flow of new orders.

Despite these challenges, several signs point to a more positive market outlook.

ASTRO (American Society for Radiation Oncology) and NCCN (National Comprehensive Cancer Network) have expanded their policies for which proton therapy is a treatment option. This should facilitate its penetration in the US market.

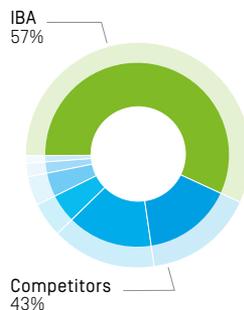
IBA's aim is to create a worldwide proton therapy platform based on a long-term strategy and ideally placed to profitably capture projected market growth over the long-term.

Our strategy will focus on two axes:

- Growing the market by facilitating evidence generation and creating awareness of the benefits of proton therapy, whilst improving its affordability
- Increasing IBA's market share with its superior clinical technology, fastest installation times,

Number of patients treated by IBA solutions **+60 000**

Proportion of patients treated by IBA equipment

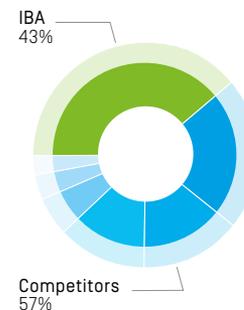


proven quality of service and unique ability to completely upgrade all systems to the latest technology available.

This strategy is backed up by a solid worldwide network of stakeholders and collaborators, which is essential if IBA is to be in a position to offer a full range of proton therapy services, which will not only release the brakes in terms of treatment adoption,

Market share of IBA proton therapy systems **44%**

Market share of IBA treatment rooms



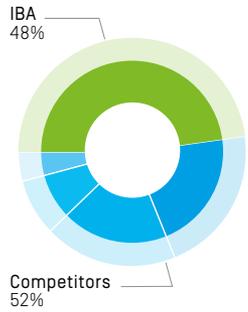
but also improve recognition of its effectiveness and market growth.

IBA is holding its position as market leader, with approximately 44% of all proton therapy systems sold. By the end of 2017, more than 60,000 patients had been treated by IBA clients, more than all the installations of its competitors combined.

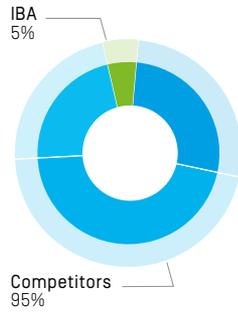
Market shares of
IBA treatment rooms
worldwide

43%

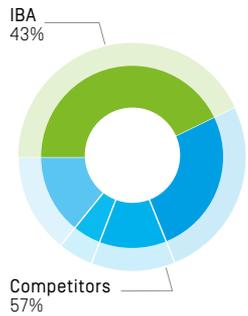
North America



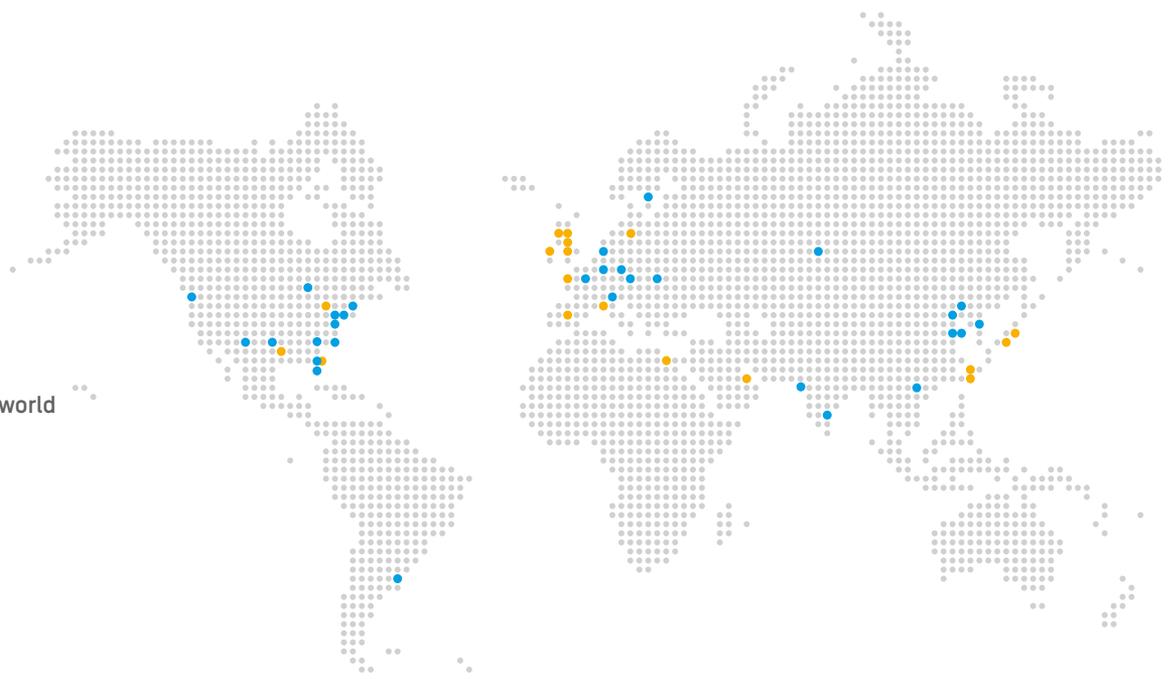
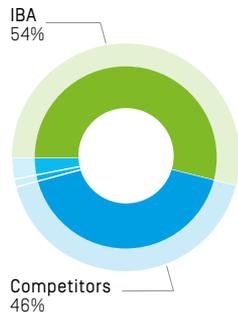
Japan



APAC minus Japan



Europe and the rest of the world



● Proteus®PLUS ● Proteus®ONE

Dosimetry

IBA OFFERS INNOVATIVE AND INTEGRATED QUALITY ASSURANCE SOLUTIONS FOR RADIO THERAPY AND DIAGNOSIS. EFFECTIVE AND INTUITIVE, THEY CAN BE RELIED UPON TO GIVE USERS TRUE PEACE OF MIND.

Both in radiotherapy and medical imaging radiations must be used with caution. In the case of radiotherapy, the tumor mass is exposed to high doses of destructive rays, with millimetric precision, whilst at the same time reducing as much as possible the exposure of healthy tissue. In medical imaging, the aim is to minimize the doses to which patients are exposed, whilst maintaining a high-quality image.

IBA offers a full range of tools for the precise calibration of medical radiation equipment and measurement of the doses of ionizing radiations absorbed by patients during medical procedures.



#1

The world's leading supplier of innovative dosimetry and QA equipment

+10 k

More than 10,000 users worldwide

+1 000

MyQA users

FOR A SAFER RADIOTHERAPY: QUALITY ASSURANCE FROM MACHINE COMMISSIONING TO PATIENT TREATMENTS

In order to better safeguard patients, it is vital that a series of quality control measures are taken to ensure that machines are properly calibrated. These measures make it possible to ensure that machines will deliver the exact dose intended by the medical team.

For our clients, it is also important that these quality control measures are accurate, fast and reliable, so that more patients can be treated.

IBA Dosimetry offers a full and integrated range of software and equipment for calibration, verification and quality assurance purposes in standard radiotherapy and proton therapy treatments.

As a result, medical practitioners can work at peace with regard to the safety of their patients.



➤ IBA offers the best solutions for the safety of patients undergoing radiotherapy and medical imaging

FOR A SAFER MEDICAL IMAGING: QUALITY ASSURANCE FOR BETTER DIAGNOSIS AND DOSE CONTROL

IBA's quality assurance solutions applied to diagnostic and radiotherapeutic imagery enable a better-quality image to be obtained: diagnosis and therapy can therefore be more accurately determined and the dose to be delivered more precisely calculated.

With just a single exposure, IBA Dosimetry offers a full and instantaneous analysis of the dose delivered in the imaging process.

IMAGING MARKERS: SAFER AND MORE EFFECTIVE RADIATION TREATMENTS

In addition to the quality assurance solutions for radiation measurements, IBA Dosimetry also offers Visicoil fiducial markers: flexible, they can be inserted directly into soft tissue and are visually identifiable during the radiotherapy treatment set up. Minimally invasive, so as to ensure greater comfort for patients, the markers are also stable in the tissue, providing a reliable target (tumor) reference point just before the treatment.



This makes it possible to position the patient perfectly so as to ensure more effective treatment. The new Visicoil MR provides a clear reference point for magnetic resonance imagery (MRI), enabling a precise image and accurate definition of the tumor to be obtained for treatment planning purposes.



MYQA QUALITY ASSURANCE

More than 1000 healthcare centers worldwide use the myQA® solution, which is the first full quality assurance tool on the market. The tool incorporates quality assurance processes, applications and quality assurance workflows into one common software platform.

By grouping together all the applications and data relating to quality assurance, myQA® is able to define a new standard for the efficient flow of information. This package offers a complete overview of the radiotherapy department, providing connectivity between users worldwide. Consequently, new treatment methods can be employed more rapidly and safely, with improved safeguards for patients throughout their treatment.



Being so straightforward to use it allows us to plan to the capabilities of the treatment machines, rather than limiting what we do because legacy verification processes cannot keep up. This ensures our clinicians can offer the best possible care to their patients.



Docteur Andrew Reilly

Head of the Radiotherapy Department at the new North West Cancer Centre in Londonderry, United Kingdom

RadioPharma Solutions

BETTER DIAGNOSIS FOR MORE EFFECTIVE TREATMENT STRATEGIES

IBA RadioPharma Solutions assists nuclear medicine departments and radio-pharmaceutical product distribution centers to design, build and operate a radio-pharmacy.

Its extensive range of cyclotrons and Synthera®+ synthesis module is employed in the production of a large number of radio-pharmaceutical products used for the diagnosis of severe diseases in cardiology, neurology and oncology.

The new Cyclone®KIUBE enables progressive upgradability, offering the market improved production performance levels. It is used to produce several different types of radioactive tracer.

As of the end of 2017, IBA RadioPharma Solutions has sold more than 270 cyclotrons and more than 550 Synthera® chemistry modules worldwide.

Buying a cyclotron represents the first stage in the construction of a functional and operational radio pharmacy, which is a complex project requiring the integration of all the key components as well as ancillary equipment.

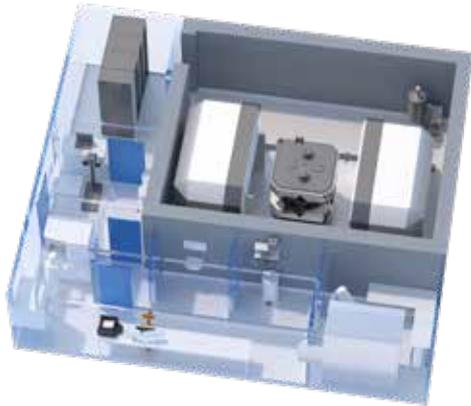


+270

cyclotrons
sold worldwide

+550

Synthera®
sold worldwide



IBA RadioPharma Solutions markets IntegraLab®, a fully-integrated solution which combines all the equipment and services needed to set up a radio-pharmaceutical product production center.

Thanks to the latest innovations, such as the Cyclone® KIUBE, IBA has been able to design the IntegraLab® ONE, which is the smallest integrated radio-pharmacy in the world.

With a surface area of less than 100m², this optimized solution covers the planning of the building, the selection of all production equipment, qualification, validation, staff training, maintenance and numerous other services related to the creation and operation of radio-pharmacies.



We have had the very first Cyclone 18/9 produced by IBA in 1990 and it is still operational today. We are still very happy with the performance thanks to multiple upgrades we can match quality and performance.



Dean Jolly
Manager Cyclotron facility
à McGill University, Canada



At IBA, we are proud to support our clients throughout the long life-cycle of our equipment. Radio-pharmaceutical centers are becoming more and more complex and consequently demand an increasing number of services to maximum their efficiency.



Bruno Scutnaire
Executive Vice President
IBA RadioPharma Solutions

Industrial and Sterilization Solutions

A PROVIDER OF SOLUTIONS FOR INDUSTRIAL AND STERILIZATION APPLICATIONS, IBA IS WORLD LEADER IN THE SUPPLY OF ELECTRON, X-RAY AND PROTON ACCELERATORS.

The two main markets covered by this division are the sterilization of single-use medical equipment and the improvement of the physical properties of polymers (crosslinking).

In the sterilization market, IBA offers solutions that enable customers to sterilize medical devices either with x-rays or by electron beams. The industry sees them as an alternative to sterilization technologies using chemical or radio-active compositions.

The second key market is polymer crosslinking. Its main use is in the automotive industry, providing it with high-performance electrical cables that are light and compact and thus contribute to the reduction of vehicle power consumption.



➤ **Focus on innovation with advanced research & development programs**

IBA Industrial is constantly evaluating new markets with the potential for growth, such as cargo control and the food sterilization by means of x-rays.

IBA Industrial is continually investing to improve the performance, reliability and energy efficiency of its product lines.

In 2017, the division launched two major research and development programs with a view to adding new functionalities to its accelerators. The first, New Horizon, enables the energy efficiency of all Rhodotron® accelerators to be improved by reducing their electricity consumption.

This characteristic makes IBA products more competitive than linear accelerators. This research program also opens the door to new applications: for example, the Rhodotron® 40MeV offers a new solution for the production of radio-isotopes by photo-nuclear reactions.

The second program is the Rhodotron® compact TT50. Initially dedicated to the detection market, this solution can also be used by centers engaged in sterilization and the processing of food products.

Thanks to the results recently produced by the New Horizon research program, in 2018 IBA Industrial plans to strengthen its presence in existing markets whilst continuing to expand its installed base.



The IBA Industrial X-ray generator, based on Rhodotron® technology, is the key component of a new type of container control system installed in the port of Boston, in the United States. This advanced, non-intrusive system for inspecting cargoes is designed to detect, localize and identify contraband and security threats.



||| IBA has been very important to Passport success. We took part in the TT50 development and it's remarkable it came to reality. We cannot wait to have a chance to use it!

||| **Bob Ledoux**
Chief Executive Officer Passport Systems,
Inc Boston, MA, United States

Sustainability

A STAKEHOLDER APPROACH

Since its creation over 30 years ago, IBA has had a long-term outlook, with a mission, ethical and transparent commitments and a purpose that gives the company a direction. In 2015, IBA defined a framework around its different initiatives in order to establish a sustainability program.

Numerous projects have been launched since then. However, in 2017, IBA decided to go further. The company specified its long-term vision and ambition for sustainable development, a long-term ambition that brings together all its staff.



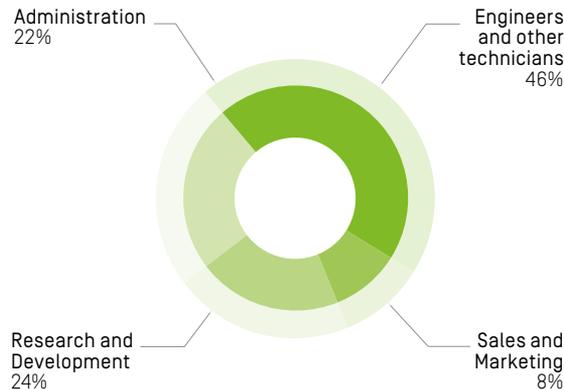
IBA deliberately began listening to each of its five stakeholders – patients/customers, employees, Society, Planet and shareholders. The company has included the issues of each of them in its thinking on sustainable development since day one. This involvement is crucial if our actions are to be in line with our different stakeholders: there is systematic reflection upstream of any new initiative so that we can identify the impacts and, if necessary, develop a strategy to counterbalance them.

Pausing so that we can better understand their interests and issues is a necessary and recurrent step in defining our corporate strategy and for the company's success. A strong interest in the environment and nature helps the company to realize daily the importance of working to a systemic approach, in a natural or socio-economic context, to extend the life of the company and its mission for future generations.

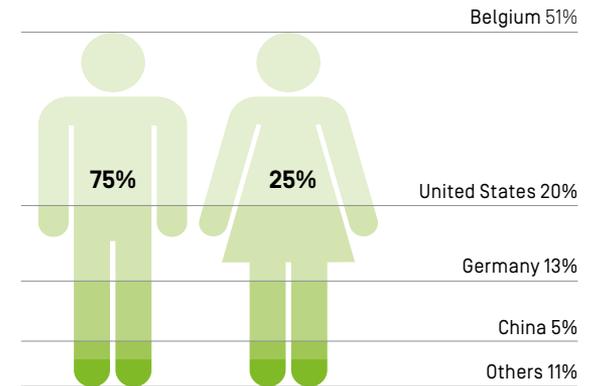


1 518 employees

Functions



IBA employees worldwide



THE LONG-TERM VISION

All economic activity takes place within an ecosystem whose long-term survival depends on the harmonious cohabitation of society with its natural environment. In fulfilling its mission, IBA is totally committed to the achievement of that aim.

IBA's technological solutions meet one of society's key aspirations: namely the health and wellbeing of everyone on the planet. Their main contribution is in the fight against cancer for diagnosis, treatment and dosimetry, but also other industrial applications related to health, safety and the environment.

The key-stone of IBA's ambition, in terms of long-term growth, is to contribute to the deployment of proton therapy worldwide so that it can be used for all patients that will benefit from it.

IBA is also eager to confirm its role as a leader in its quest to achieve positive impacts through ambitious projects: for example, the expansion of an economic model that will enable the company to become more profitable at the same time as drastically reducing its negative impacts (also referred to as "externalities").

IBA has seen fit to publicize its goals, in terms of growth between now and 2020 in its five main business sectors, in an initial Social Responsibility report announcing its commitments. That report is available on the website <https://iba-worldwide.com/about-iba/sustainability>.

Our approach

1. is driven by our values
"care", "dare", "share" and "be fair";
2. is participatory: we seek the advice and collaboration of our stakeholders;
3. aims for a balanced consideration of our stakeholders' opinions;
4. is open and fueled by a culture of dialogue.





Prof. Dr. Beate Timmermann

*Director of the particle therapy clinic
and medical director of the West German Proton Therapy
Centre, Essen, Germany*

Governance

MANAGEMENT TEAM



Olivier Legrain
Chief Executive Officer



Jean-Marc Bothy
Chief Strategy Officer



Soumya Chandramouli
Chief Financial Officer



Frédéric Nolf
Chief Human Resources &
Sustainability Officer



Yves Jongen
Founder &
Chief Research Officer

BOARD OF DIRECTORS



Pierre Mottet
Representing Saint-Denis SA
Internal Director

- Chairman of the Board of Directors since May 2013
- Member of the IBA board of Directors since May 1998
- CEO of IBA from 1996 to May 2012
- Director of UWE (Walloon Business Association), agoria and several funds and start-ups in the field of health and environment



Marcel Miller
Representing Marcel Miller SCS
Independent Director

- Member of the IBA Board of Directors since May 2011
- Currently president of Alstom Belgium
- Director Agoria Wallonia
- Vice-President UWE
- Director of Technord



Katleen Vandeweyer
Representing Katleen Vandeweyer
Comm. V
Independent Director

- Member of the IBA Board of Directors since May 2013
- Group Finance Director at Proximus SA/NV / Member of the Ageas Board of Directors



Yves Jongen
Internal Director

- Member of the IBA board of Directors since May 1991
- Founder and Chief Research Officer
- Managing Director since 1991
- Before the creation of IBA in 1986: Director of the Cyclotron Research Center at the Catholic University of Louvain (UCL)



MD Hedvig Hricak PhD, DR. H.C.
Independent Director

- Member of the IBA Board of Directors since May 2017
- Chair of Department of Radiology, Memorial Sloan-Kettering Cancer Center (MSKCC), a member of the Molecular Pharmacology and Chemistry Program, Sloan-Kettering Institute, and professor, Gerstner Sloan-Kettering Graduate School of Biomedical Sciences



Jeroen Cammeraat
Independent Director

- Member of the IBA Board of Directors since May 2014
- Chief Executive of Cassini Technologies BV



Eric de Lamotte
Representing SA Bayrime
Other Director

- Member of the IBA Board of Directors since 2000
- Director serving the board of several companies
- Formerly Chief Financial Officer (1991-2000) of IBA



Sybille van den Hove
Representing Bridging for
Sustainability SPRL
Independent Director

- Member of the IBA Board of Directors since May 2015
- Former Chair Scientific Committee European Environment Agency



Olivier Legrain
Internal Director

- Member of the IBA Board of Directors since May 2012
- Chief Executive Officer and Managing Director since May 2012

Financial Review and Outlook

IBA reported revenues of EUR 287.4 million, down 12.6% from 2016.

Recurring operating loss before interest and taxes (REBIT) fell sharply due to cyclical market slowdown and individual project delays. The Group REBIT fell to EUR -11.6 million from EUR 37.1 million in 2016. IBA reported a net loss of EUR -39.2 million down from a profit of EUR 24.4 million in the prior year.

Financial results were strongly affected by the strengthening of the euro against the US dollar. Other operating expenses were mostly related to restructuring and reorganization costs and write-offs on some assets and receivables.

2017 was a challenging year for IBA, reflecting a slower market and individual project delays. However, with the world's most attractive proton therapy offering, IBA has clear competitive strengths and a strategy to continue to profitably capture projected market growth over the long-term.

Although the proton therapy market remains lumpy, it is growing steadily over time and IBA continues to have a robust equipment and services backlog with revenues secured over three and up to ten years respectively.

The quality of the backlog and the fastest

demonstrated times from installation to customer acceptance position IBA optimally to leverage the expected growth in proton therapy and maintain its position as market leader. In addition, Dosimetry had a strong year with good backlog conversion.

	2017 (EUR 000)	2016 (EUR 000)	variation (EUR 000)	CAGR ⁽¹⁾ 2015/2016
Sales and services	287 421	328 774	-41 353	-12.6%
Gross margin	94 919	138 561	-43 642	-31.5%
REBITDA ⁽²⁾	-4 740	42 690	-47 430	-111.1%
REBITDA/Sales and services	-1.6%	13.0%		
REBIT ⁽³⁾	-11,596	37 137	-48 733	-131.2%
REBIT margining	-4.0%	11.3%		
Net result	-39 201	24 440	-63 641	-260.4%*

*Impacted by almost EUR 40 million non-recurring profits, including foreign exchange gains on USD and the capital gain on exit from the Molecular business in 2015

(1) CAGR: compound annual growth rate

(2) REBITDA: recurring earnings before interest, taxes, depreciation, and amortization

(3) REBIT: recurring earnings before interest and taxes

EUR 287.4
million
2017
revenue

EUR 283
million
equipment
backlog in
Proton Therapy
& Other
Accelerators

EUR 689
million
service
backlog in
Proton Therapy
& Other
Accelerators

OUTLOOK

The fundamentals of the proton therapy market continue to be solid, as demonstrated by the numerous prospects IBA is pursuing across all global markets. IBA remains fully focused on driving growth and, alongside our strategic partnerships and ongoing focus on cost controls and maintaining the world's most competitive and attractive proton therapy offering, IBA will continue to drive towards a positive REBIT and net profit after tax in 2018 and beyond.

SALES TRENDS BY ACTIVITY ⁽¹⁾

	2012 [EUR '000]	2013 [EUR '000]	2014 [EUR '000]	2015 [EUR '000]	2016 [EUR '000]	2017 [EUR '000]	CAGR ⁽²⁾ 5 years
Turnover	221 106	212 412	220 577	270 357	328 774	287 421	5.4%
Proton Therapy	133 213	121 202	128 488	161 938	226 529	193 391	7.7%
Other Accelerators	38 991	45 387	49 199	54 323	54 137	40 193	0.6%
Dosimetry	48 902	45 823	42 890	54 096	48 108	53 837	1.9%

⁽¹⁾ The figures do not include any pharmaceutical activity

⁽²⁾ Compound annual growth rate

CONTINUING OPERATIONS

	2017 [EUR 000]	2016 [EUR 000]	Variation [EUR 000]	Variation
Capital expenditure	15 276	12 965	2 311	
Research and development expenses	34 435	32 350	2 085	-27.7%
Equity	108 694	150 391	-41 697	-134.8%
Net cash position ⁽¹⁾	-15 477	44 495	-59 972	1.3%
Current liabilities	188 926	186 443	2 483	-12.6%
Total assets	332 518	380 617	-48 099	
Return on Equity	-36.1%	16.3%		
Return on Capital Employed (ROCE)	-8.1%	19.1%		
Share price on December 31 [Euro]	23.89	41.64		-42.6%
Number of shares	29 962 246	29 764 396		0.7%
Net earnings per share (EPS) [Euro per share]	-1.31	0.82		
Price/Earnings	-18.26	50.71		
Market capitalization ⁽²⁾	715 648	1 239 389		
Book value per share [Euro per share]	3.63	5.05		
Dividend per share	0.00	0.29		
Enterprise value ⁽³⁾	731 125	1 194 894		-38.8%
EV/REBITDA	-154.2	28.0		NA
Employees (FTE) as of December 31	1 476	1 431	45	3.1%

⁽¹⁾ Cash and cash equivalents less long-term and short-term financial debts

⁽²⁾ The share price on December 31 multiplied by the number of shares.

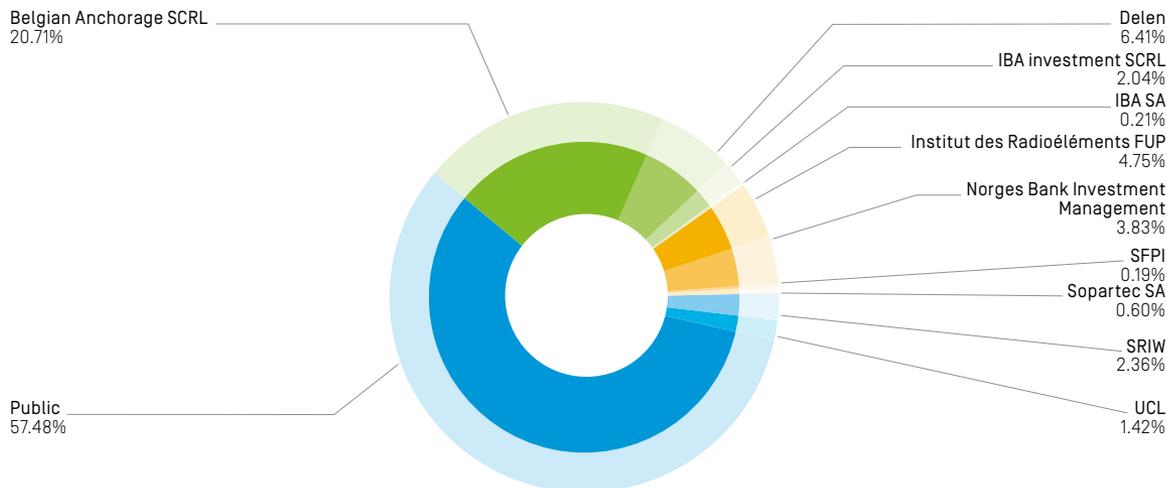
⁽³⁾ Market capitalization less the net cash position

Stock and shareholders

IBA stock is listed on the Euronext Brussels continuous market (compartment B since January 17, 2013). It was introduced on the Stock Exchange on June 22, 1998 at the price of EUR 11.90 (adjusted for a 5 to 1 split in June, 1999). IBA stock closed at EUR 23.89 on December 31, 2017.

The total number of outstanding stock options as at December 31, 2017 amounts to 400 153. There are no convertible bonds or bonds with warrants outstanding as at December 31, 2017.

IBA SHAREHOLDERS AS AT DECEMBER 31, 2017



SHAREHOLDERS' AGENDA

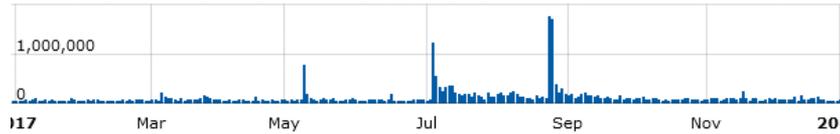
First Quarter 2018 business update	May 9, 2018
General Assembly	May 9, 2018
First Half 2018 results	August 23, 2018
Third Quarter 2018 business update	November 15, 2018

EVOLUTION OF IBA STOCK - 2017

Price ● IBAB variation: -43.93%



Volume



2017 Mar May Jul Sep Nov 20





IBA Contact

Thomas Ralet
Vice-President Corporate Communication
Tel.: +32 10 47 58 90
E-mail: investorrelations@iba-group.com

Version française disponible sur demande.

Ion Beam Applications, SA

Chemin du Cyclotron, 3
1348 Louvain-la-Neuve, Belgique
Tel.: +32 10 47 58 11 - Fax: +32 10 47 58 10
RPM Nivelles - TVA: BE 428.750.985
E-mail: info-worldwide@iba-group.com
Website: www.iba-worldwide.com

E.R.: IBA SA, Chemin du Cyclotron, 3
1348 Louvain-la-Neuve, Belgique.

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PROTECT +
ENHANCE +
SAVE LIVES