

aston Healthcare from A to Z!

group





Anton Artyomov
CEO, Aston Group

Dear friends!
Aston Group was founded in early 1999 in the midst of a severe economic crisis. In those days, the word „crisis“ itself seemed a novelty and it was hard to imagine that it would stay with us for a long time. I believe that the key to overcoming any crisis is to move ahead despite the obstacles and „adverse“ circumstances. For that very reason we keep improving our expertise, expand the range of services, penetrate other countries' markets and come up with new ideas.

Certainly, the healthcare industry keeps changing at a rapid pace and the evolution of society, science and technology has made the patient the central focus for all market participants. This global change has spurred introduction of patient-centered models, which are being implemented in many countries of the world. I am proud that Aston has been at the forefront of patient-centered approach in this country. For the past seventeen years we've been providing accurate data-driven information, including the real-world evidence, implementing patient support programs and offering solutions that complement and enhance the value of medical services. We help patients' voices be heard and seek to align the efforts of all industry players which in turn leads to further growth and development of the industry.
Let's grow together!



Our Mission

Aston Group contributes to the development of the healthcare market by promoting collaborative interaction between the industry players and providing them with marketing and consulting services and a range of comprehensive integrated solutions.



aston
•consulting

Aston Consulting (page 4):

- Strategic consulting
- Marketing research
- Pharmacoeconomic analysis (HTA)
- Patient support programs (PSP)
- PharmCompass



aston
•clinical

Aston Clinical (page 15):

- Clinical patient registries
- Epidemiological studies
- Laboratory diagnostics programs
- Clinical studies
- Registration of INN



aston
•analytics

Aston Analytics (page 21):

- Aston Intelligence: BI-system



aston
•technologies

Aston Technologies (page 24):

- Quinta platform and Quinta solutions
- Web-sites and educational web portals
- Expert systems

Developing the healthcare sector through better interaction of industry players



Background: 17 years of experience in healthcare market research

Professional team: over 100 office staff and 1,000 field force

Geography: offices in Moscow and Almaty (Kazakhstan)

Coverage: over 200 cities in Russia and CIS countries

Therapeutic areas: oncology, oncohematology, gastroenterology, neurology, endocrinology, orphan diseases, rheumatology, pediatrics and neonatology, cardiology, infectious diseases, pulmonology, urology and nephrology, gynecology

Proprietary databases and analytical products. Quinta CRM system, Aston Intelligence, monitoring of regulatory changes
Cross analysis using relevant information and in-depth insights

Constant development of competencies: knowledge sharing, implementing best-in-class practices, membership in leading industry associations (ESOMAR, RAPM, ADMIT)

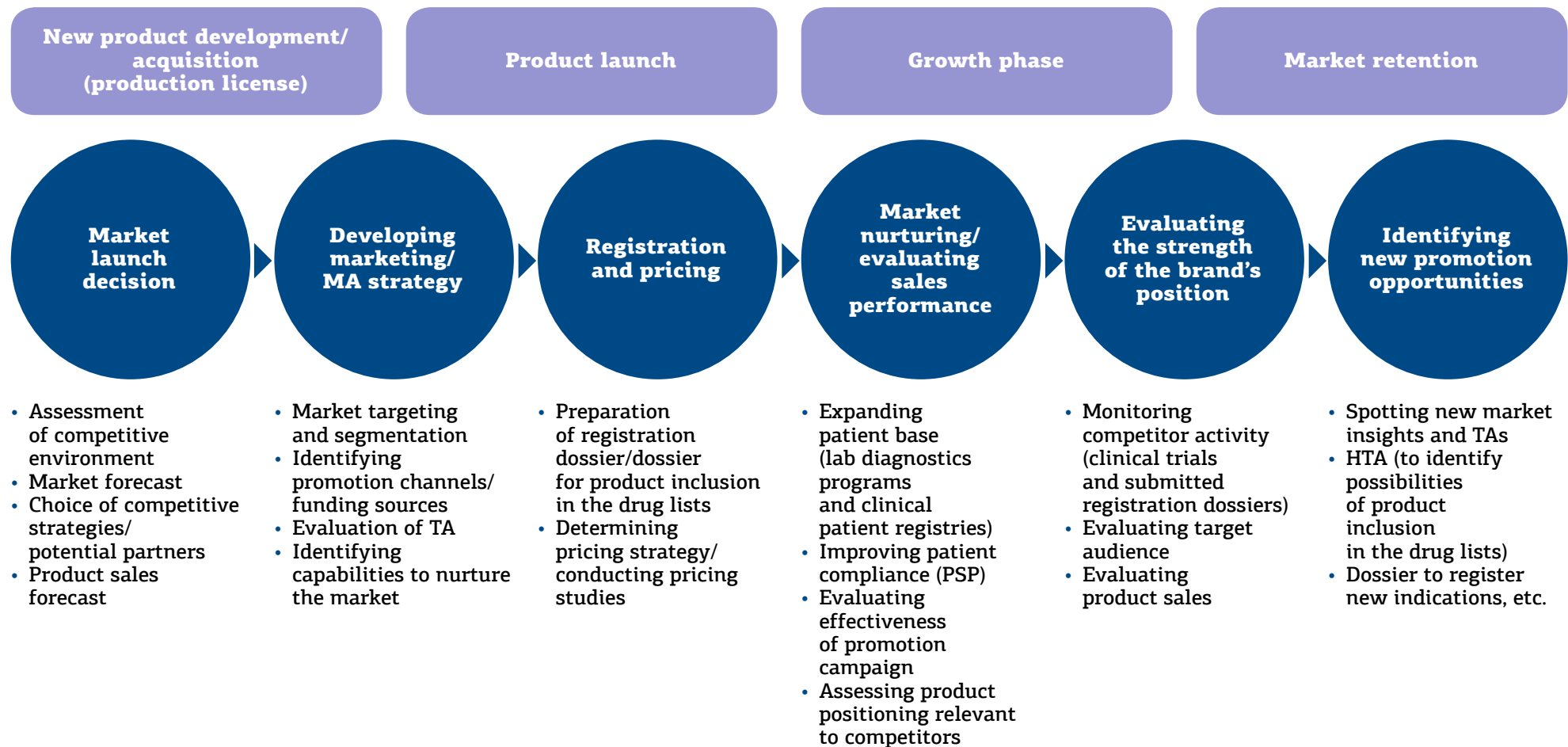
More information about Aston Group:
www.aston-group.org

aston • consulting



Aston Consulting utilizes diverse resources available to all other units of Aston Group to address the needs of market participants. By integrating primary data from range of sources and using high-end technology platforms AC provides a strong arsenal of value-based solutions. Throughout its entire operation, AC team representing different areas of expertise, such as marketing, HTA, biostatistics, IT, sociology and epidemiology has been offering actionable insights and analytics. The tasks that AC solves for its large client base include: development of product portfolio, launch of new products, strategy assessment and development, market access, pricing and many more. Owing to long-term productive interaction with medical and pharmaceutical community, vast experience and comprehensive regional coverage, Aston Consulting has earned a reputation as a reliable and expert partner in the Russian healthcare market.

Relevant solutions throughout product life cycle



Strategic consulting



Igor Petrushin
Director of Marketing
Research and
Consulting

Our solutions:

- Portfolio assessment
- Product launch and sales force strategy
- Market access strategy
- Reimbursement strategy
- Marketing strategy
- Product lifecycle management

Relevant and validated information is key to any successful market strategy.

Using own primary data, high-end technology platforms and a wide range of marketing tools Aston Group provides customers with a solid basis for strategic decision-making.

Aston Group's primary data and proprietary technology platforms



- Monitoring healthcare regulation and policy development
- Monitoring public pharmaceutical funding



- Monitoring public drug procurement



- Clinical patient registries
- Epidemiological and screening studies

• Primary Market Research

Aston Group's analytical products and solutions



Assessment of sales performance in Russia as a whole and by region, including:

- Distributors
- Drug manufacturers based on data cross-analysis:
- Government funding of drug supply
- Actual volume of procurements in the public sector
- Actual prescription rates

• Pharmacoeconomic analysis

Strategic consulting

Marketing research



Evgenia Ganeeva
Head of Market
Research Department

A wide range of own resources to conduct diverse marketing research.

- Assessment of competitive environment and market forecast
- Targeting and segmentation
- Identifying promotion channels
- Evaluating target audience
- Pricing studies
- Evaluating effectiveness of promotion campaigns
- Analysis of consumer preferences
- Monitoring sales force performance
- Testing advertising concepts
- Spotting new market insights

Aston Consulting's resources to conduct primary market research

- Field force covering 1200 cities in Russia and CIS countries
- Over 800 interviewers
- On-staff moderators for focus groups
- Own focus room for on-line focus groups
- On-line research

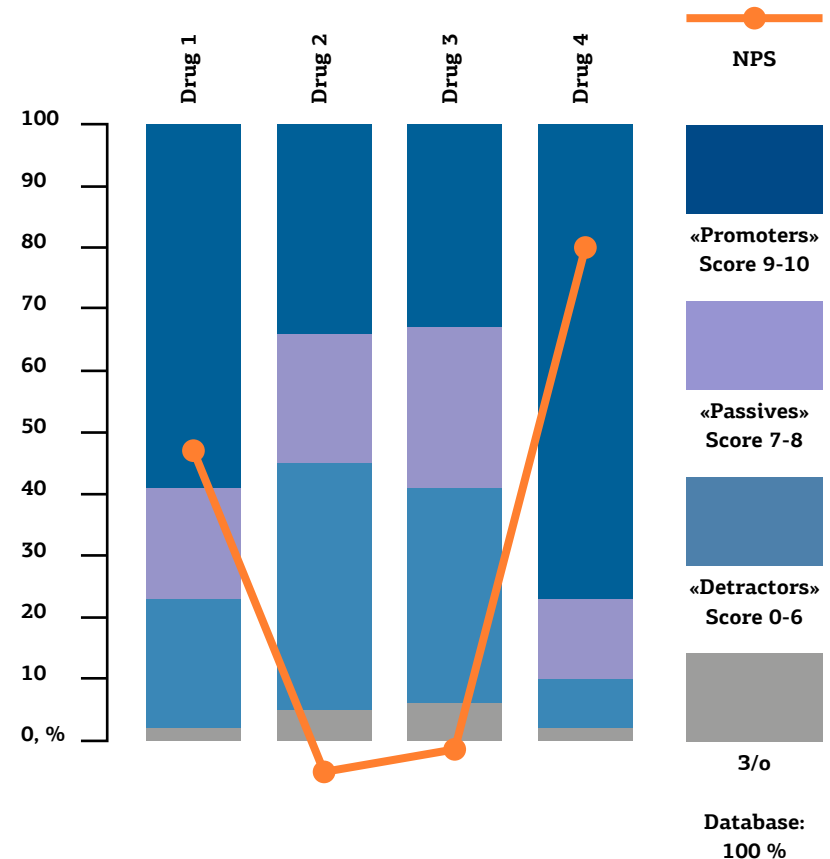
Proprietary databases:

- Physicians' database — over 80 000 practitioners
- Customer panel — 25 000 people

Annual coverage:

- Over 25 thousand participants of screening projects
- 55 thousand physicians and pharmacists
- Over 500 health care administrators
- Over 3063 distributors and pharmacy chains

Sample. Net promoter score



Pharmacoeconomic analysis (HTA)

Sample. Pharmacoeconomic analysis

Assessment of clinical and economic benefit of a centralized monitoring system for patients with atrial fibrillation as opposed to INR testing under routine practice

Sources of information

- Secondary data derived from systematic review and meta-analysis (MEDLINE, PUBMED, EMBASE и Cochrane Central Register of Clinical Trials)
- Collection of primary data at the regional level

Scope of analysis

- Regional

Methodology

- Cost-benefit analysis, budget impact analysis



Outcome: doubled survival rate and reduced costs.

Applicability of results to a broader context:

- The model can be implemented throughout the country
- Can be used as Market Access tool at the regional level

Efficient tool to streamline allocation of healthcare resources and justify additional health costs.

- Rationale for increasing funding allocations for health interventions
- Evaluation and adjustment of standards of care
- Inclusion of new medical technologies in standards of care and treatment protocols
- Rationale for shifting budget priorities toward selected pharmaceuticals and medical devices
- Assessment of alternative medical technologies

Resources available for conducting pharmacoeconomic analysis:

- Own HTA experts (incl. those with a number of industry awards)
- Software developers (creation of electronic calculator models, including on-line models)
- Access to reliable data from clinical registries and epidemiological studies
- ISPOR membership, collaboration with leading international HTA agencies
- Collaboration with leading Russian medical research institutions

Анализ затрат на 1 пациента (ФП и ИКС) в год к 5-ому году внедрения АК (руб.)

При типичной практике							При внедрении антиагуляционных кабинетов						
	Общие затраты	Затраты на 1 пациента	Число пациентов, госпитализированных, чел.	Затраты на 1 пациента в год по подразделениям			Общие затраты	Затраты на 1 пациента	Число пациентов, госпитализированных, чел.	Затраты на 1 пациента в год по подразделениям			
				Внутреннее отделение на АБС	В случае внедрения антиагуляционных кабинетов (АБС и ИКС) при условии сохранения штата	В случае сохранения штата				Внутреннее отделение на АБС	В случае внедрения антиагуляционных кабинетов (АБС и ИКС) при условии сохранения штата	В случае сохранения штата	
Общие затраты	924 592 461	33 059		46 049	31 015	21 242	868 529 104	30 872		36 570	31 020	21 180	
Инфузионная стационарная койка	342 585 654	12 249		26 540	7 898	8 811	342 431 248	11 868		26 941	7 898	8 800	
И.Т.С.													
Дневная койка	117 443 867	4 139		8 242	4 221	3 960	117 849 426	4 097		8 244	4 221	3 952	
Индивидуальная койка при амбулаторной АП	20 778 846	743		2 173	285	285	20 940 789	754		2 185	285	285	
Общественные и амбулаторные стационары	176 889 923	6 325		17 385	9 923	9 923	187 416 217	6 473		17 406	9 923	9 923	
Амбулатория (ИКС)	27 473 029	982		4 103	0	0	46 204 816	1 594		7 098	0	0	
Отделение стационарных койки	529 484 553	18 932		17 705	31 258	31 258	476 130 309	17 215		9 266	21 242	11 543	
И.Т.С.													
Интенсивная койка	52 141 089	1 864	888	2 128	2 128	0	47 460 889	1 701	308	1 878	2 128	0	
Взрослая	278 728 709	9 966	1 718	9 099	12 187	0	284 027 401	8 472	1 440	2 082	12 187	0	
Педиатрическая койка	6 617 523	237	130	276	276	0	6 241 940	220	162	276	276	0	
И.Т.С.	23 889 349	801	481	1 382	800	0	16 889 870	597	363	852	800	0	
Специальная койка	2 736 447	98	59	33	243	0	2 708 447	98	59	33	243	0	
Педиатрическая койка при АП	166 861 561	5 966		4 182	9 827	11 489	166 861 561	6 056		4 206	9 827	11 489	
Дневная койка		0		0	0	0		0		0	0	0	
Медицинская койка	12 796 049	458		425	557	0	10 805 016	391		512	557	0	
Скорая стационарная койка	23 539 202	842		842	842	842	22 867 945	816		728	842	842	
Дневная койка	16 186 954	579		600	600	0	16 254 706	582		609	609	0	
Число сохраненных койки			78						149				
CER к последнему году прогноза	11 886 300						5 827 818						

Sample. Interactive calculator of new health technology costs

Прогноз на 5 лет

Если Вы хотите оценить затраты, связанные с организацией АК в пятилетней перспективе и сравнить их с затратами при типичной практике контроля МНО, заполните следующие поля

Введите год окончания периода

2024 2025 2026 2027 2028 2029 2030

Укажите планируемые численность пациентов на АБС к концу 5 лет

2 528 759 2 522 380 2 518 713 2 515 819 2 512 778

Используйте данные демографического прогноза Федеральной службы государственной статистики для Вашего региона

При желании Вы можете оценить, как будут меняться затраты при изменении числа пациентов на АБС. Для этого в свободной форме укажите, **НА СКОЛЬКО ПРОЦЕНТОВ** Вы планируете увеличить число пациентов на АБС. Обратите внимание, что такое значение (которое отображается в строке ниже) **НЕ ДОЛЖНО ПРЕВЫШАТЬ** значения в красной рамке

На сколько процентов изменится численность пациентов с **ФП** на АБС через 5 лет, %

При типичной практике Численность пациентов на АБС через 5 лет, чел. 4 809 значение не должно превышать 22 303

При внедрении антиагуляционных кабинетов Численность пациентов на АБС через 5 лет, чел. 5 909 значение не должно превышать 22 303

На сколько процентов изменится численность пациентов с **ИКС** на АБС через 5 лет, %

При типичной практике Численность пациентов на АБС через 5 лет, чел. 1 488 значение не должно превышать 1 488

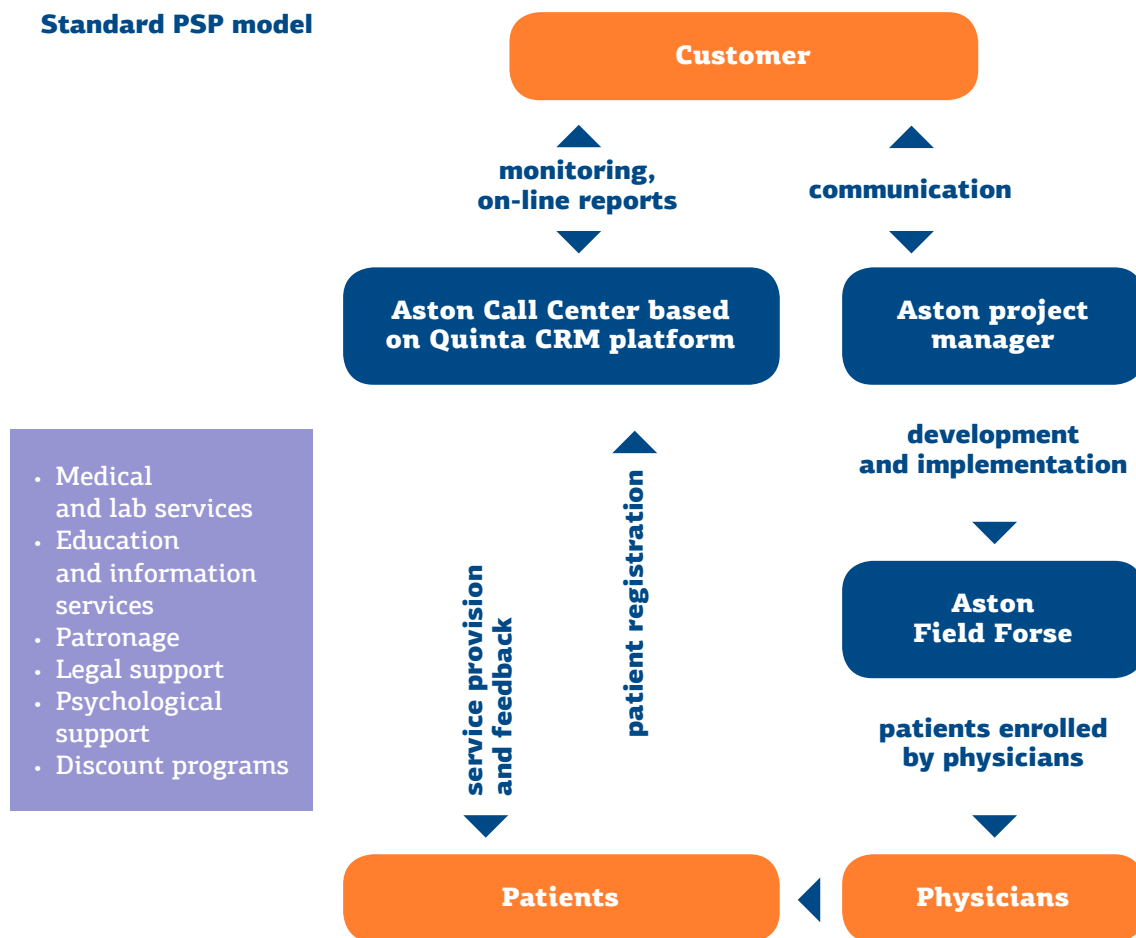
При внедрении антиагуляционных кабинетов Численность пациентов на АБС через 5 лет, чел. 1 502 значение не должно превышать 1 502

Обратите Ваше внимание, что число АК в пятом году прогноза рассчитывается автоматически, согласно параметрам, введенным в разделе "МНО" и составляет:

27

Patient support programs

Standard PSP model



- Medical and lab services
- Education and information services
- Patronage
- Legal support
- Psychological support
- Discount programs

PSP is an effective tool to engage clinically homogenous patient groups and assist them to:

- improve quality of life
- receive better access to therapy
- increase compliance
- control drug intake
- increase awareness about their condition and treatment alternatives

Resources to implement PSP

- Own call center (real-time communication channel for patients)
- Quinta Care CRM platform (efficient processing of patient information)
- Long-term contracts with leading laboratory networks (nurse patronage and lab services to patients throughout Russia)
- A wide network of regional and international partners (geographical coverage includes Russia and CIS countries)
- Strict compliance with the Federal Law №152 'On personal data protection'; Aston Group has been accredited as personal data operator by Federal Supervision Agency for Information Technologies and Communications



Maria Sdvizhkova
Head of Strategic
Consulting Department

PharmCompass — the most relevant and comprehensive information about Russian healthcare system.

Benefits of PharmCompass:

- Systemic review of available public sources, including:
 - a) regulatory framework at federal and regional level
 - b) key industry events arranged by regulators
 - c) insights from market experts and stakeholders
- User-friendly graphical format
- Tracking and analyzing industry changes and providing practical advice

PharmCompass Russia — analytical review of Russian healthcare system

Assessment of existing trends and evolution of government healthcare policy, including:

- Legal and regulatory framework (enacted legislation and draft laws)
- Public mechanisms and principles of healthcare funding
- Public mechanisms and principles guiding provision of health services
- Current system of pharmaceutical provision and reimbursement

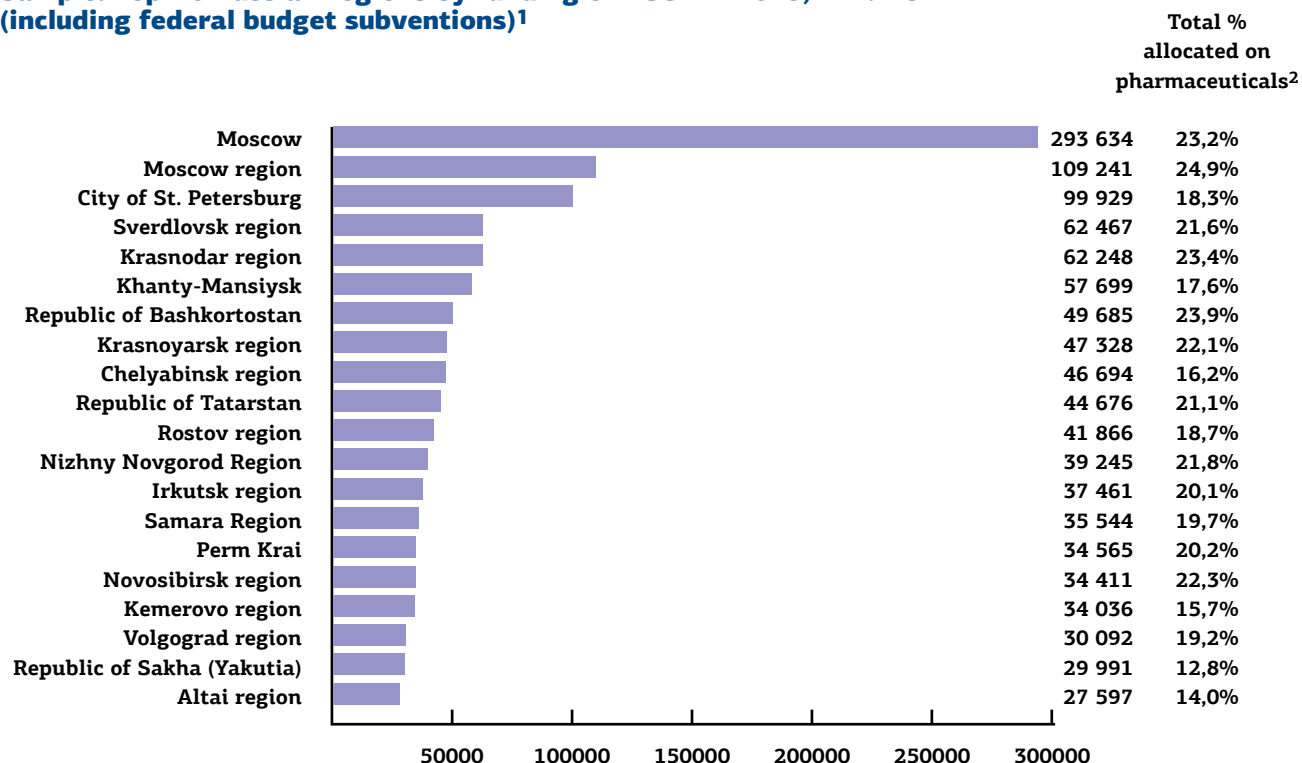
PharmCompass Russian Regions — key indicators of the regional health systems from all 85 regions of Russia

- Overview of Territorial Government Guarantees Programs for 2015 and the planning period 2016-2017 (allocation of funding on healthcare, per capita health expenditure, scope of services, sources of funding, regional health facilities, regional lists of reimbursable drugs, etc.)
- Information on regional budgets
- Total allocations on healthcare
- OMS rate agreements for 2015
- Overview of territorial programs „Healthcare Development“
- Highlight of socio-demographic indicators and epidemiological data in regional view

PharmCompass CIS — regularly updated analytical report on healthcare systems of CIS counties and Georgia:

- Key demographic and economic statistics
- Government regulation and funding of healthcare
- Current state and forecast for evolution local healthcare systems
- Drug supply systems: structure and funding sources
- Drug reimbursement landscape

Sample. Top-20 Russian regions by funding of TGGP in 2015, mln. RUB (including federal budget subventions)¹



NEW! Web access to PharmCompass Regions data.

Web access through Microsoft-powered Power BI cloud

Power BI provides additional opportunities to:

- store large amounts of structured and unstructured data
- merge external and internal corporate data
- verify data quality
- visualize data
- distribute access roles (depending on user requirements)

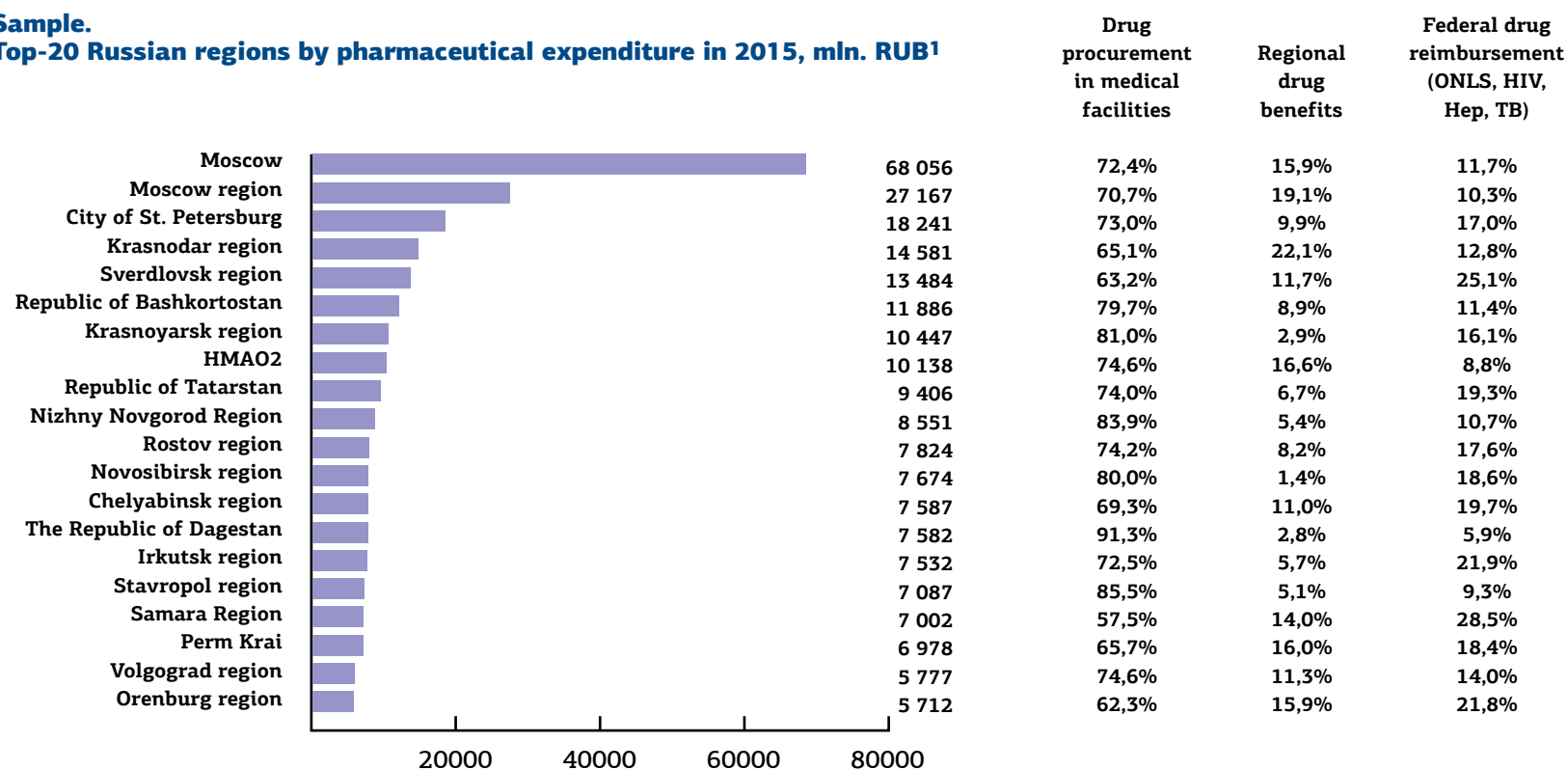
Power BI tools make possible:

- data mining at different levels (from federal down to regional and municipal level)
- possibility to track indicators change overtime
- cross comparison of data (funding under TPGG vs. per capita spending, the number of insured patients, the regional budgets, etc.)
- evaluating performance against competition based on the presence of INNs in the regional lists

¹ Resolution of the Regional Government „On the Territorial Programs of Government Guarantees of free medical services for 2015 and the planning period of 2016 -2017“

² Regional OMS rate agreements.

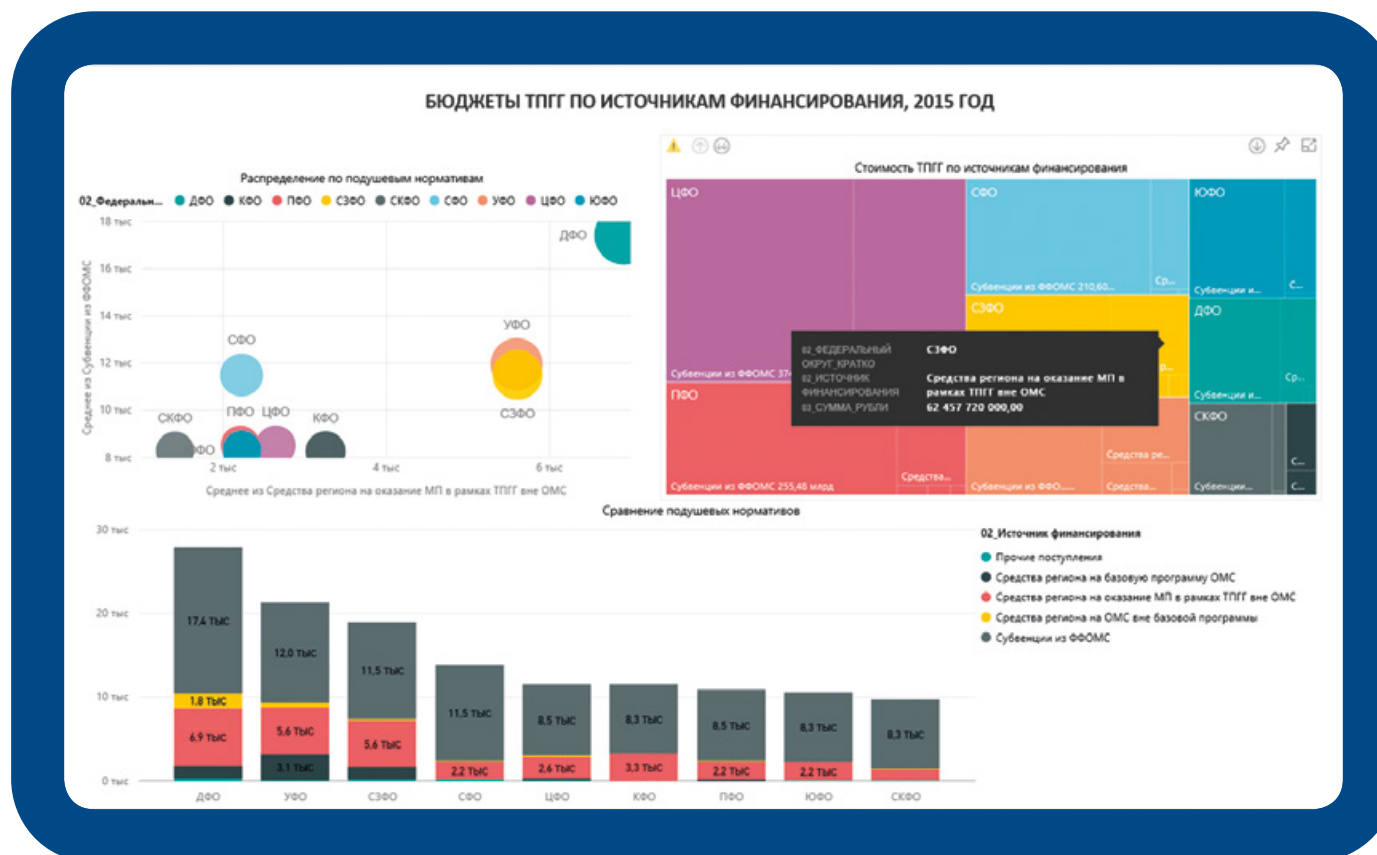
Sample.
Top-20 Russian regions by pharmaceutical expenditure in 2015, mln. RUB¹



¹ Based on the regional budgets, TPGG volumes, the amount of federal subventions and regional rate agreements

² Khanty-Mansi Autonomous Okrug

Sample. Funding of TGGP in 2015 by source and Federal District.





Aston Clinical team offers a range of solutions for challenges facing pharmaceutical manufacturers in such areas as medical research, marketing, Market Access, PR and GR. The scope of activities includes patient support programs, training programs for practitioners and multicenter clinical trials. Working in collaboration with other divisions of Aston Group, AC's efforts are continuously focused on better understanding of the market size and potential based on the data from clinical patient registries and screening programs.

Clinical patient registries



Elena Koshkarova
Head of Sales
Department

Registry data may be used in a variety of ways. Most importantly, the registries provide valuable information on actual clinical practice and help to determine the unmet needs for specialized care and high-tech medical technologies. They can also be applied for patient routing and as a rationale for shaping government drug supply policies, therefore contributing to better care and quality of life of patients.

The databases that draw on information from patient registers are widely used for pharmacoeconomic analysis, comparative assessment of treatment efficacy and estimation of the need for costly drug therapies. In addition to that, clinical registries facilitate recruitment of patients for clinical trials and present a useful tool for Market Access.

Sample. Sequence of GEBD administration in patients with rheumatoid arthritis

GEBD	Number of patients	Average duration of intake, months	Sequence of GEBD administration, number of patients					
			1	2	3	4	5	6
Abatacept	129	23	83	35	7	4		
Adalimumab	155	18	134	20	1			
Golimumab	6	6	5	1				
Infliximab	95	39	88	5	2			
Ocrelizumab	6	12	6					
Rituximab	238	22	189	36	10	3		
Tocilizumab	78	19	53	14	9	1	1	
Certolizumab pegol	41	23	29	9	2			1
Etanercept	205	10	146	48	9	2		

**Clinical registries
built on Quinta
Clinical platform**

Nº	Registry name	Supervising medical institution
1	Nationwide Registry of Patients with Rheumatoid Arthritis	Association of Rheumatologists of Russia V.A. Nasonova Research Institute of Rheumatology
2	Nationwide Registry of Children with Juvenile Arthritis	The Union of Pediatricians of Russia Scientific Centre of Children's Health, RAMS
3	Registry of Hemic Diseases	National Hematological Society, Hematology Scientific Center of MoH RF
4	Clinical Registry for Patients with Diabetic Foot Syndrome	Endocrinology Research Centre (ERC)
5	Program of Clinical and Epidemiological Monitoring of Diabetes Mellitus In Russia	Endocrinology Research Centre (ERC)
6	Registry of Patients with Hypothalamic-Pituitary Tumors	Endocrinology Research Centre (ERC)
7	The registry of HIV-infected Pregnant Women and Their Children	Republican Infectious Disease Clinical Hospital
8	Registry of Patients with Gaucher's Disease	Hematology Research Centre
9	Registry of Medullary Thyroid Cancer	Association of Head and Neck Cancer Specialists
10	Moscow Registry of Rehabilitation	Research and Practical Centre of Medical Rehabilitation and Sports Medicine
11	Improving Molecular and Genetic Diagnosis of Cancer in Russia	Russian Society of Clinical Oncology (RUSSCO)

Epidemiological studies

Sample.
Study of type II diabetes prevalence in adult population in Russia (NATION): an example of a large-scale project to evaluate epidemiology and market potential



The study was based on internationally accepted protocol:

Sample
26,700 subjects represent a micro model of the Russian population

Geographical scope:
8 Federal Districts, 63 regions, 186 settlements (88 cities, 98 rural settlements)

Structure

Epidemiological phase:
HbA1c test, anthropometric measurements (height, weight, blood pressure, heart rate, etc.)

Sociological phase: collection of socio- demographic data on participants (type of residence, lifestyle habits, etc.)

Study outcomes:

Prevalence of T2DM in Russia with breakdown by region

Role of the following factors in the onset of T2DM:

- level of physical activity
- smoking and alcohol consumption
- diet
- region of residence

Prevalence of T2DM in various ethnic groups

Estimated disease burden

Epidemiological studies provide the basis for more efficient diagnostic and treatment decisions, planning of drug supply and pharmacoeconomic evaluation.

They offer important statistics on:

- actual prevalence of disease
- patterns of disease distribution across the country
- socio-demographic and ethnic factors affecting distribution
- disease etiology (causation)
- risk factors, pathogens and trigger factors
- impact and outcomes of medical interventions (diagnostic tests, medical technologies, use of preventive care, etc.).

Aston Clinical is involved in organizing and conducting epidemiology studies of various scope and scale.

They range from projects covering large population cohorts (cancer, diabetes, etc.) to small scale research where the number of patients with a particular disease is no more than a few hundred people across the country (orphan diseases).

This is achieved by having adequate resources in place: proprietary technology platform, field network, own analytical division, expertise in key therapeutic areas, as well as years of collaboration with leading laboratories and logistics providers in Russia and the CIS countries.

Laboratory diagnostics programs



Inna Pugach
Head of Laboratory
Diagnostics Department

Sample.
Identifying target
patients through lab
diagnostics program

Problem: need for fee-based biochemical testing for concentration of parathyroid hormone (PTH) in patients with secondary hyperparathyroidism

Task: increase the number of patients who can be tested for PTH

Solution: program of free diagnosis for patients with secondary hyperparathyroidism

- registration and referral for testing of patients identified with this condition
- remuneration of the laboratories for diagnostic services rendered
- collection and systematization of data

Outcome: medication for treatment of secondary hyperparathyroidism was included in the updated Essential Drugs List in 2015



Project duration:
September 2010 —
December 2014



Geographical scope:
Moscow, Saint Petersburg,
Vladivostok, Kazan,
Novosibirsk
+13 other cities



Participating lab networks:
Vera, Invitro, SitiLab,
Helix+ 10 labs based
at various clinics

Laboratory diagnostics programs are implemented using Quinta Lab platform, which is an integrated on-line system for collection, processing and storage of diagnostic information. Currently, Aston Clinical has collaborative arrangements with lab networks (that meet GLP standards) throughout the country and implements projects covering a number of therapeutic areas, such as oncology, hematology, infectious diseases, and rare genetic diseases and some others. In addition to that, lab diagnostics based on Quinta Lab platform is an effective tool for clinical research and pharmacovigilance, as it allows monitoring patient's response to therapy and evaluating the efficacy and safety profiles. Quinta Lab can be employed for clinical trial and other purposes, including:

- collection and processing of data for preparation of drug registration dossier and pharmacoeconomic rationale
- collection and processing of data for pharmacovigilance (regular lab testing and monitoring patient's condition during post-registration period)
- generation of safety reports.

Innovative lab diagnostics solutions based on Quinta Lab platform contribute to early detection of disease, identification and confirmation of pathology at the molecular level, selection of effective treatment and, ultimately, improving the quality of life of patients.

Clinical studies

Clinical studies contribute to developing innovative medicines and generics by providing evidence for their safety and efficacy.

Aston Group brings together the developers and manufacturers of pharmaceuticals and the CROs in Russia and the CIS countries. The scientific potential of our staff allows us to perform a wide range of services for clinical research in different fields of medicine.

The practical aspects of our assistance include:

- development of research documentation
- selection of clinical centers
- project management
- monitoring compliance with clinical studies regulations (ICH GCP) and the applicable laws
- logistics support
- data processing
- biostatistics

Aston Clinical: a wide range of competencies and tools for managing clinical studies



An experienced team of experts with the skills and expertise in the respective specialized field



Extensive experience in clinical research and consulting



Development of scientific evidence for clinical research based on customer requirements



Use of reliable resources at all stages of research (clinical centers, leading lab networks, unified information database)

The growing competition and the rising costs of resources are putting pressure on healthcare market participants to enhance planning efficiency. Today, more than ever, the industry players need relevant, comprehensive and timely information. The quality of underlying data and the depth of analysis become crucial. Aston Analytics' solutions help get a better grasp of the current and future trends of the healthcare market nationwide.

aston
• **analytics**

The logo for Aston Analytics is positioned in the upper right corner. The word "aston" is in a dark blue, lowercase, sans-serif font. Below it, a small dark blue dot is followed by the word "analytics" in a white, lowercase, sans-serif font. The background of the right side of the slide features a vibrant green abstract graphic with overlapping circles, lines, and a textured pattern.

Products and services



Olga Savina
Lead Key Account
Manager

Pharmon Census (monitoring of inpatient health facilities)

Hospital Census — a unique database of Russian hospitals with round-the-clock beds

Information on each hospital includes:

- Hospital name, address, phone number, territorial/departmental subordination, hospital profile, name of the head physician
- Bed capacity
- Therapeutic areas
- Surgical unit (number and type of surgeries)
- The project on hospital statistics was originated in 2009.

Monitoring of the drug procurement through public tenders/auctions

Monitoring information from the government procurement website upon customer's request and examining supporting tender documentation

Pharmon Import (database of imported drugs and pharmaceutical substances)

The data is collected using public sources (possibility of weekly tracking of particular INN)

Aston Intelligence

Unified information system based on an integrated analysis of data from various sources to optimize decision-making.

- Extended analytics
- Data visualization
- Merging with data sources
- Aggregated insights
- Storing and structuring of large amounts of data
- Accessible from any web-based device

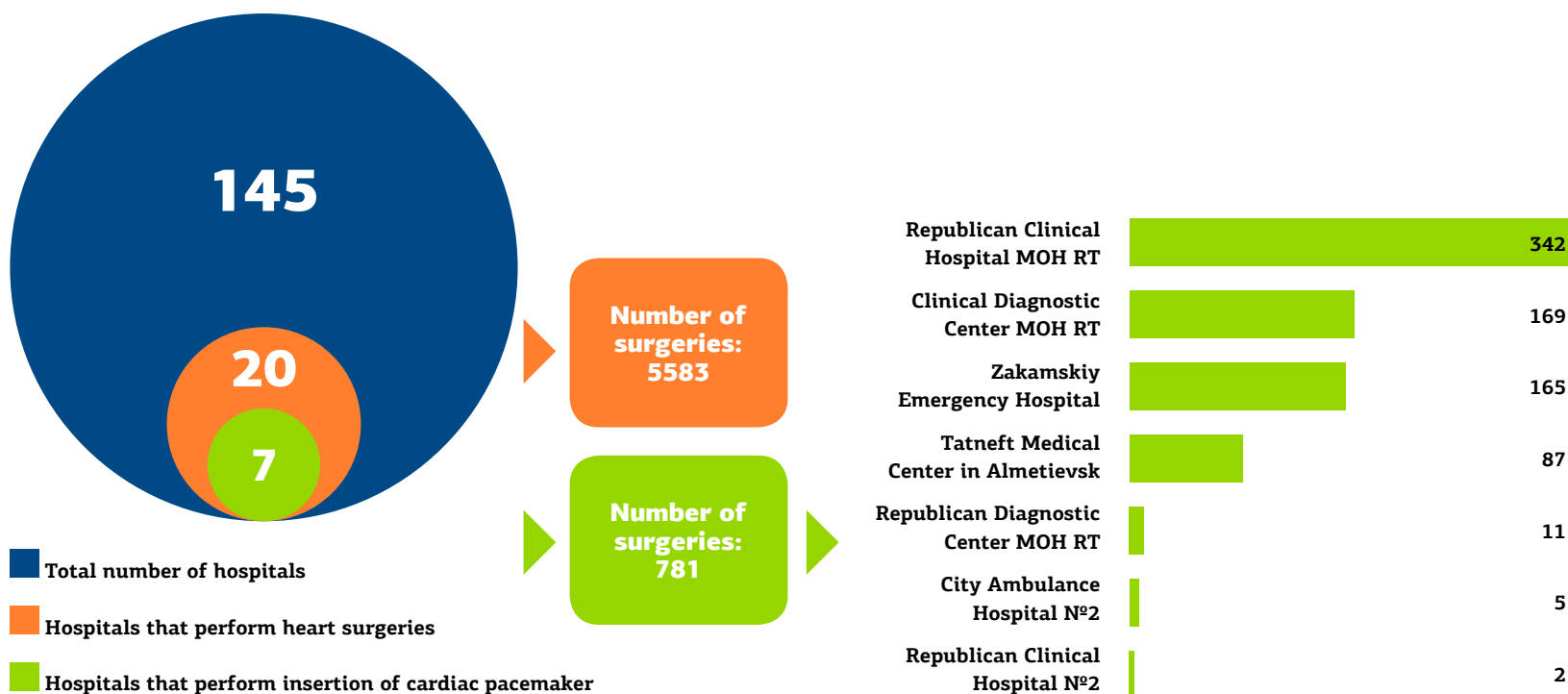
Effective tool for targeting inpatient facilities

Pharmon Census — a unique analytical product providing data on Russian inpatient facilities (updated every two years)

Pharmon Census can be used for:

- Targeting inpatient facilities
- Exploring specialized aspects (therapeutic areas)
- Integration with other sources of information, (e.g. rate agreements for delivery of health services)

Sample Segmentation:
Republic of Tatarstan.
Heart surgery.
Insertion of cardiac
pacemaker.
2013



Monitoring of tender procurement by medical facilities

Evaluating information from the government procurement website upon customer's request under Federal Law №94 and №44; monitoring procurement by state entities under Federal Law №223 using the data on announced tenders and government contracts for such items as:

- Enteral nutrition
- Medical devices
- Medical equipment

Expert audit of public tenders

- This type of evaluation, which is based on examining supporting tender documentation helps to improve the quality

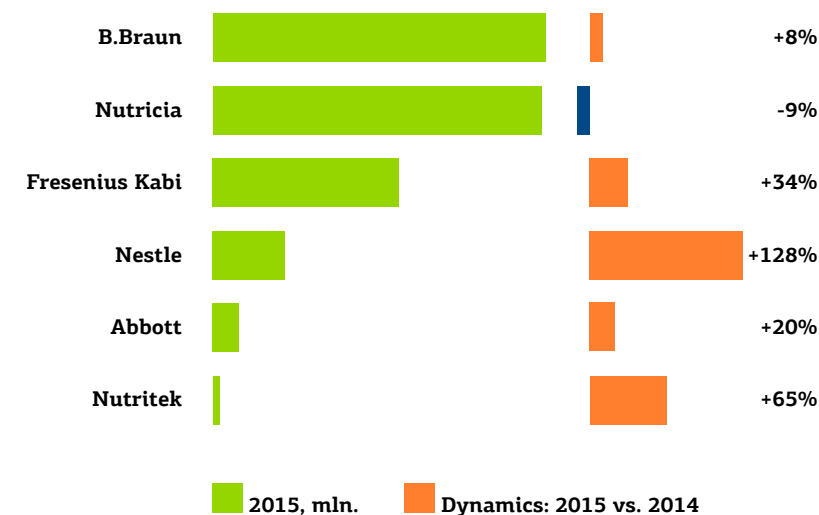
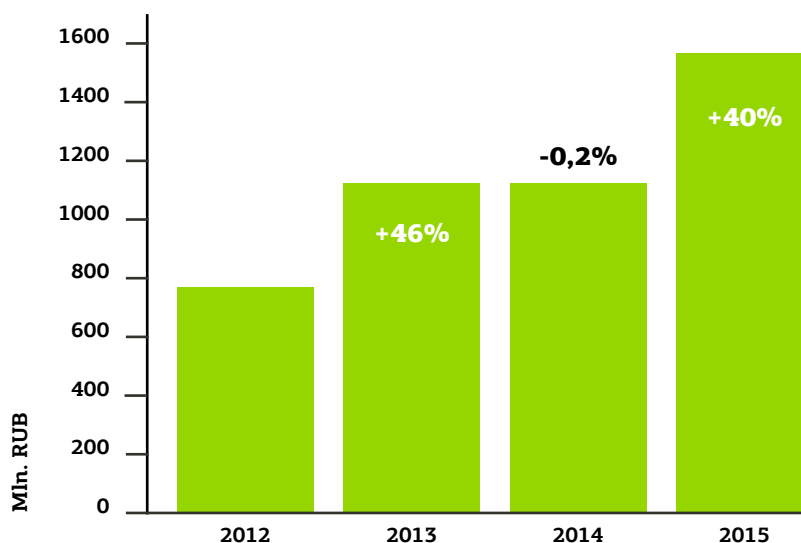
of information obtained from the official public procurement website.

- INN/TN/pharmaceutical form/quantity/price, etc.
- Drug quantity calculation in required units
- Conversion to required currency (at the rate of the Central Bank on the date of tender)
- Specific requirements for distributors in the regions

Extended analytics:

- Market size and dynamics
- Performance of sales representatives
- Sales volumes for specialty distributors
- Effectiveness of promotion campaign

Samples.
1. Enteral nutrition market (public sector). 2012-2015
2. Enteral nutrition market (public sector). Rating of manufacturers in 2015



Accurate and prompt information on imported drugs and pharmaceutical substances

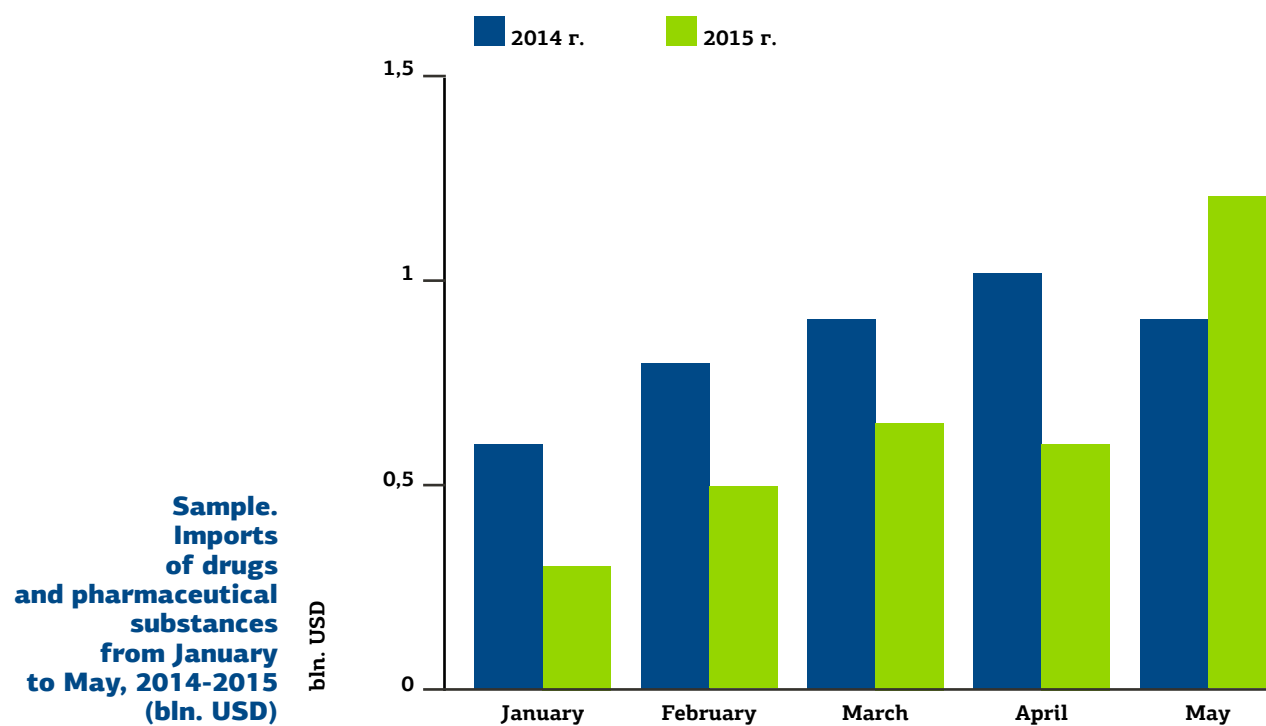
Data is collected using open public sources

Information delivery:

- On a monthly basis
- On a weekly basis (on-line tracking of particular INNs)

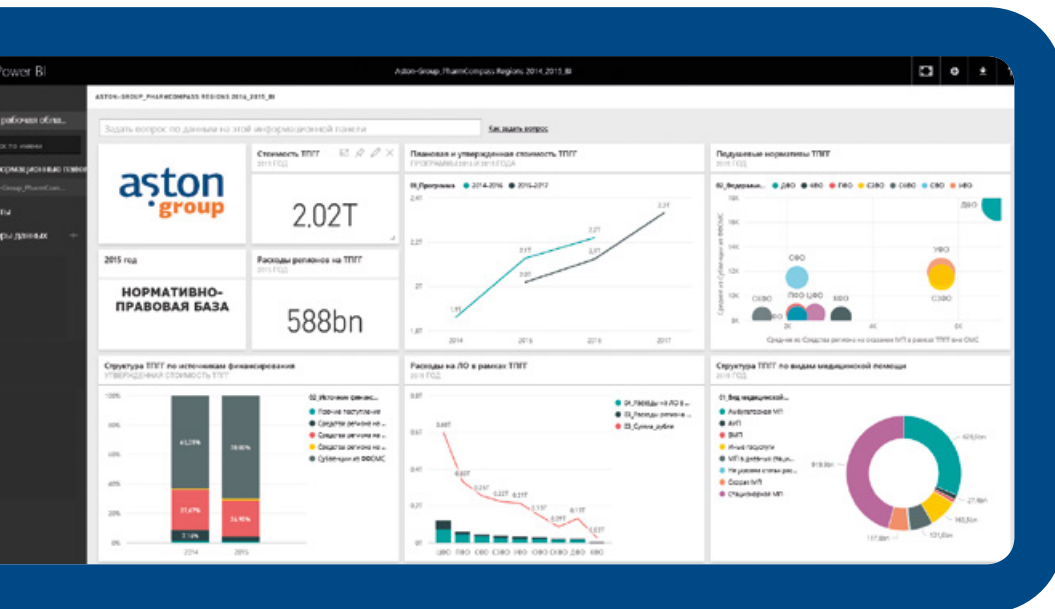
Tasks solved:

- Assessment of the volumes of imported products vs. competition (incl. information on supplier and receiving company)
- Tracking imports of new drugs
- Evaluation of market size and comparison with relevant data from other sources



Products and services

aston
• analytics



Analysis of data from different sources helps to:

- Evaluate promotion efficiency (as compared to approved portfolio strategy)
- Identify the points of growth for sales teams
- Make necessary adjustments and fine-tuning of KPIs
- Improve targeting and segmentation of regions/health facilities/target audience

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Tenders (Monitoring + expert audit)

- Collection of information from public procurement website
- Examining tender documentation

Pharmon Import

- Tracking imported drugs and pharmaceutical substances
- Tracking is done on a weekly basis

Pharmon Census

- Monitoring of inpatient health facilities
- Bed capacity
- Number of surgeries and beds by hospital unit

Other sources

Distributor reports

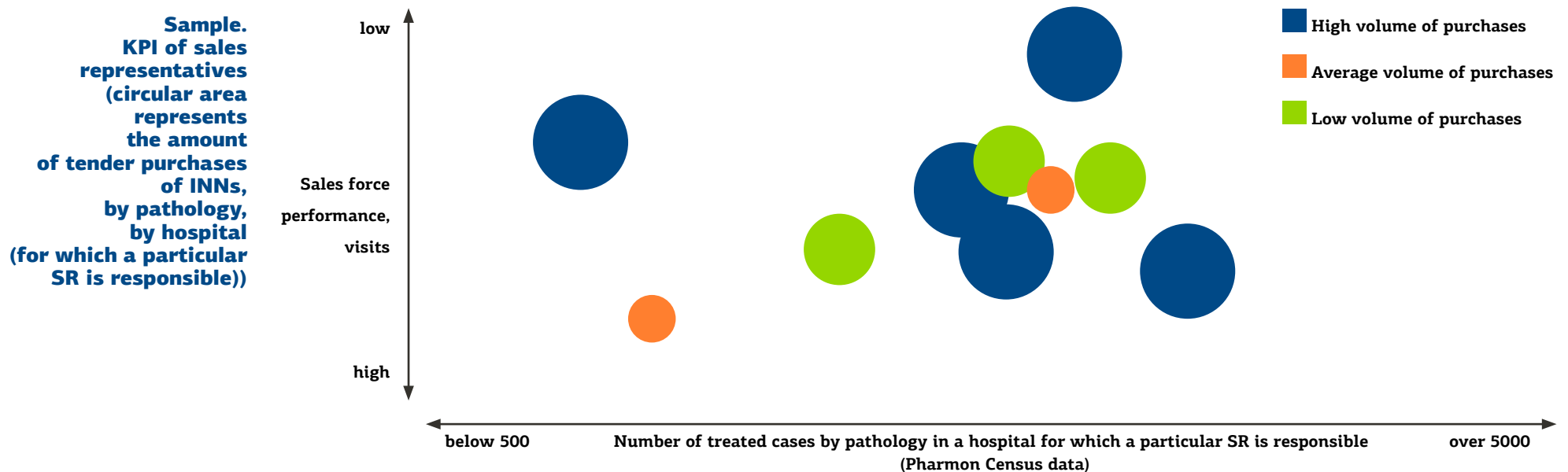
Reports on the Sales Force performance

Retail audit

Information on public health funding

Additional sources of information

Analysis of information available from different sources



Analysis of results:

- SR7 — high performance in a hospital with a small number of patients („Best Practice“)
- SR4 — high performance; high level of field engagement in a hospital with a large number of patients
- SR2, SR5, SR8 — high performance, low level of field engagement
- SR1, SR6, SR9 — moderate performance; average level of field engagement

- SR10 — inadequate performance; low level of field engagement
- SR3 — inadequate performance; high level of field engagement in a hospital with a large number of patients

Conclusions:

- Increased frequency of visits to the facilities with a large number of treated cases should lead to an increase in the volume of tender purchases of INNs under consideration.
- SR7's performance can be considered „Best Practice“

aston technologies

The logo for Aston Technologies is displayed in a dark blue serif font. Below the word 'aston' is a small white dot, followed by the word 'technologies' in a white sans-serif font. The background of the slide features a large, abstract graphic in shades of blue, consisting of overlapping circles, lines, and a textured, brush-stroke-like pattern.

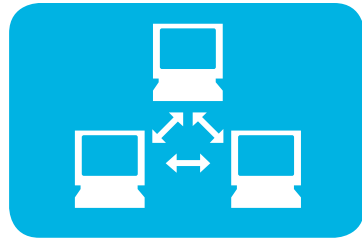
IT solutions offered by Aston Technologies support effective communication between various target groups, including patients and practitioners at each point of contact (Internet, contact centers, mobile devices, social networks, etc.).

The following patient needs can be met using our IT solutions:

- Increasing awareness about particular disease/therapy
- Enhancing patient knowledge and adherence
- Improving life expectancy and QoL

Aston Technologies provides various tools for audience targeting:

- Web-sites, web-portals, tailored solutions
- Mobile apps
- Expert Systems



**Clinical
monitoring**



**Laboratory
diagnostics**



**Information
and logistics
support**

Quinta — a proprietary fully automated universal system build on MS Dynamics CRM platform. It is widely used for on-line management of Aston Clinical projects.

Quinta Clinical — a comprehensive solution for on-line management of clinical monitoring projects, such as patient registries, clinical and epidemiological studies, screening programs and patient routing.

Quinta Lab — an integrated on-line database for maintaining, storing and processing patient diagnostic data (test results). All business processes are automated.

Quinta Care — a solution that provides logistics support for healthcare market participants: physicians, patients, visiting nurses, laboratories, distributors, courier service and makes possible monitoring the effectiveness of health and social programs. Quinta solutions comply with international standards and best practices and can be integrated with local and international projects.

Technology solutions for effective audience targeting



Aston Technologies' web-solutions include development of web-portals and web-sites for patients and healthcare providers and various high-tech customized solutions, such as **Virtual Hospital**.

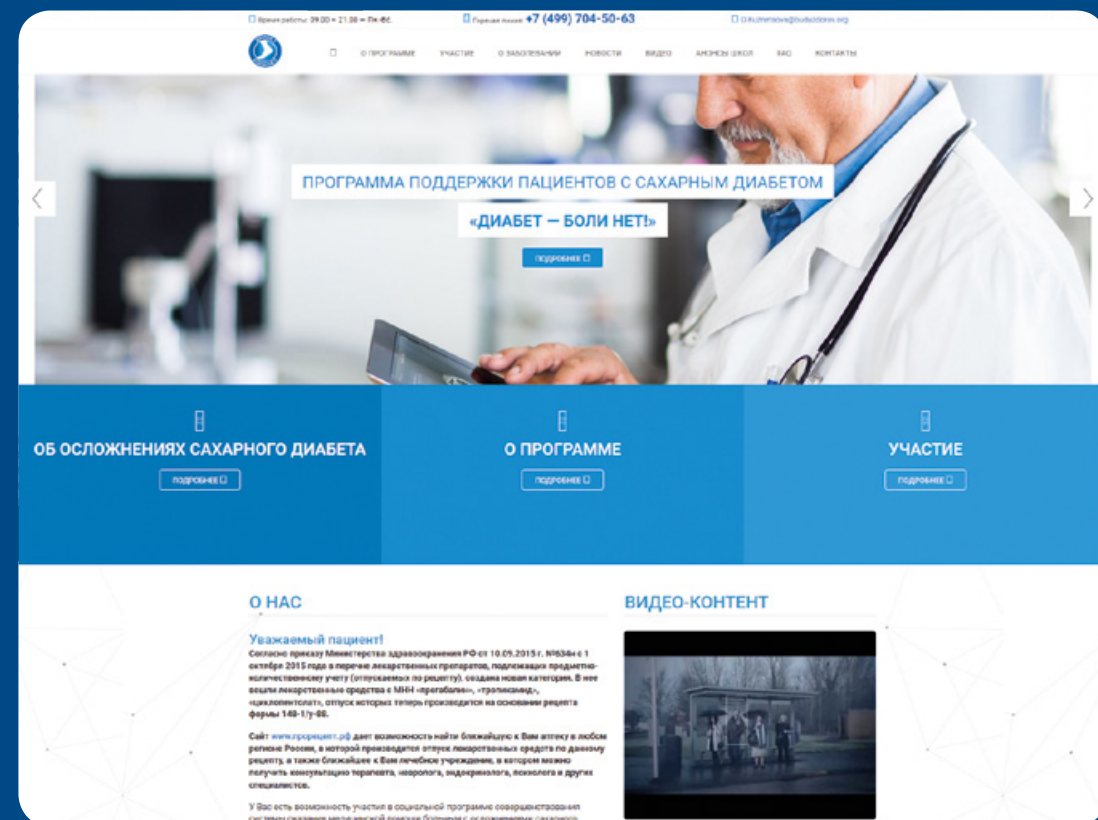
Sample. Web-portal for health care providers: National Registry of Patients with Diabetes Mellitus www.diaregistry.ru

- Unified information platform that brings together
- over 2,500 endocrinologists
- Opportunity to catch up on the latest research data
- Reliable source of regulatory expertise
- Training programs and distance learning
- Number of web-portal visitors: at least 300 daily.

Aston Technologies' mobile apps help optimize the patient pathway and solve a number of tasks such as: raising patient awareness, self-monitoring and checking treatment compliance. Aston Group team provides support in testing mobile apps on selected target audiences, at various stages of treatment process, and guarantees safety and confidentiality of personal data.



Sample. Creation of web-resource for endocrinology specialists



Aston Technologies' Expert Systems

Relevant solution for clinicians to assist them in making informed decisions with respect to therapy selection based on approved standards of care, national and international clinical guidelines and best practices.

As a result of clinician's exploring and pinpointing data on disease progression and clinical manifestations, the System will automatically suggest preferred (acceptable) treatment protocols, including dosing schedule best suited for a particular patient.

Expert System capabilities include:

- Clinical recommendations based on treatment methods and procedures available at health facilities throughout Russia
- Treatment regimens based on approved clinical protocols
- Drugs are listed in accordance with marketing authorization issued by the Ministry of Health
- Drug list spreadsheet filtered by disease subtype, contraindications, drug resistance, co-morbidities and disease progression scenarios
- Drug compatibility references
- Regional aspects of drug provision

The final choice regarding treatment strategy to be used in a particular patient is made by an attending physician.

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