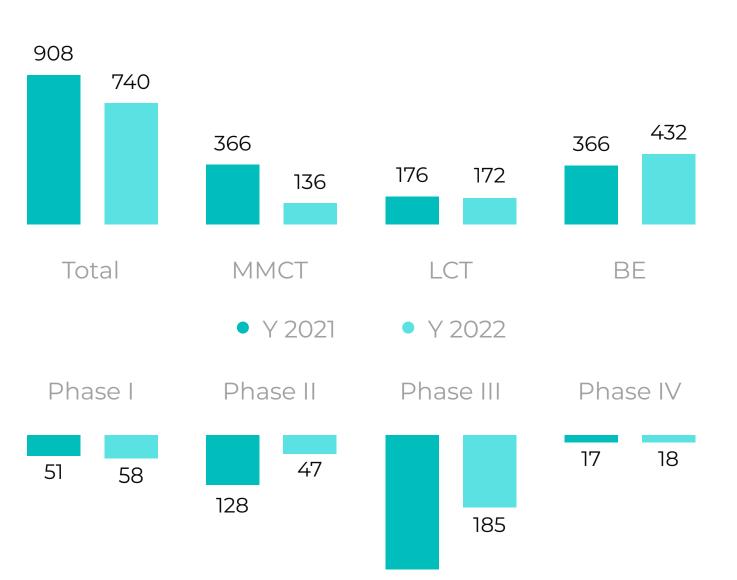
Y 2022 Research report

# O Trial Data

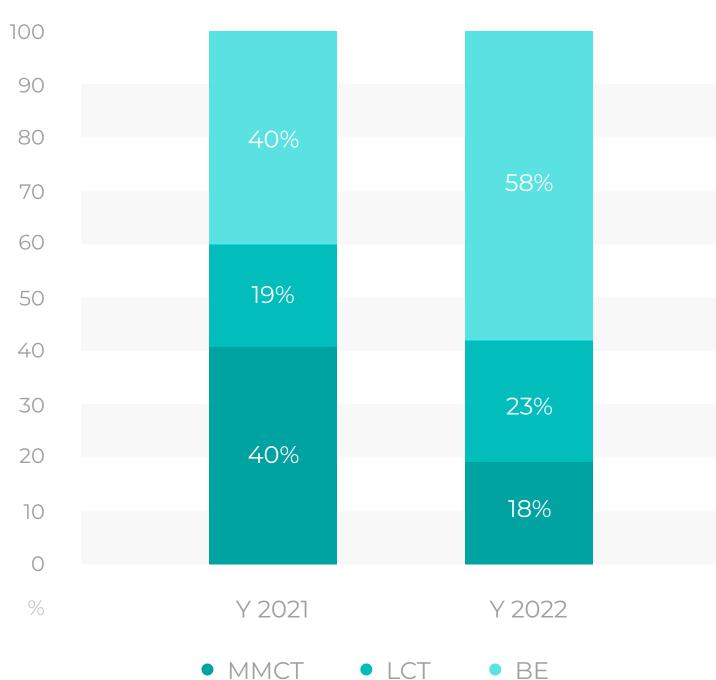
During the Year 2022 the Ministry of Health of the Russian Federation approved the start of 740 new clinical trials of all types, including local and bioequivalence studies. This represents a 19% year on year drop by the total number of studies.

The dominant type of clinical trials conducted across Russian sites in the Year 2022 were BE (Bio-equivalent Clinical Trials). The market share of MMCTs (Multinational Multi-center Clinical Trials) dropped from 40% to 18% of the total number of trials. The market share of Local Clinical Trials (LCTs) increased from 19% to 23% whilst the Bio-equivalent (BE') share flourished from 40% to 58%.

## **Breakdown of Clinical Trials by Type and Phase**

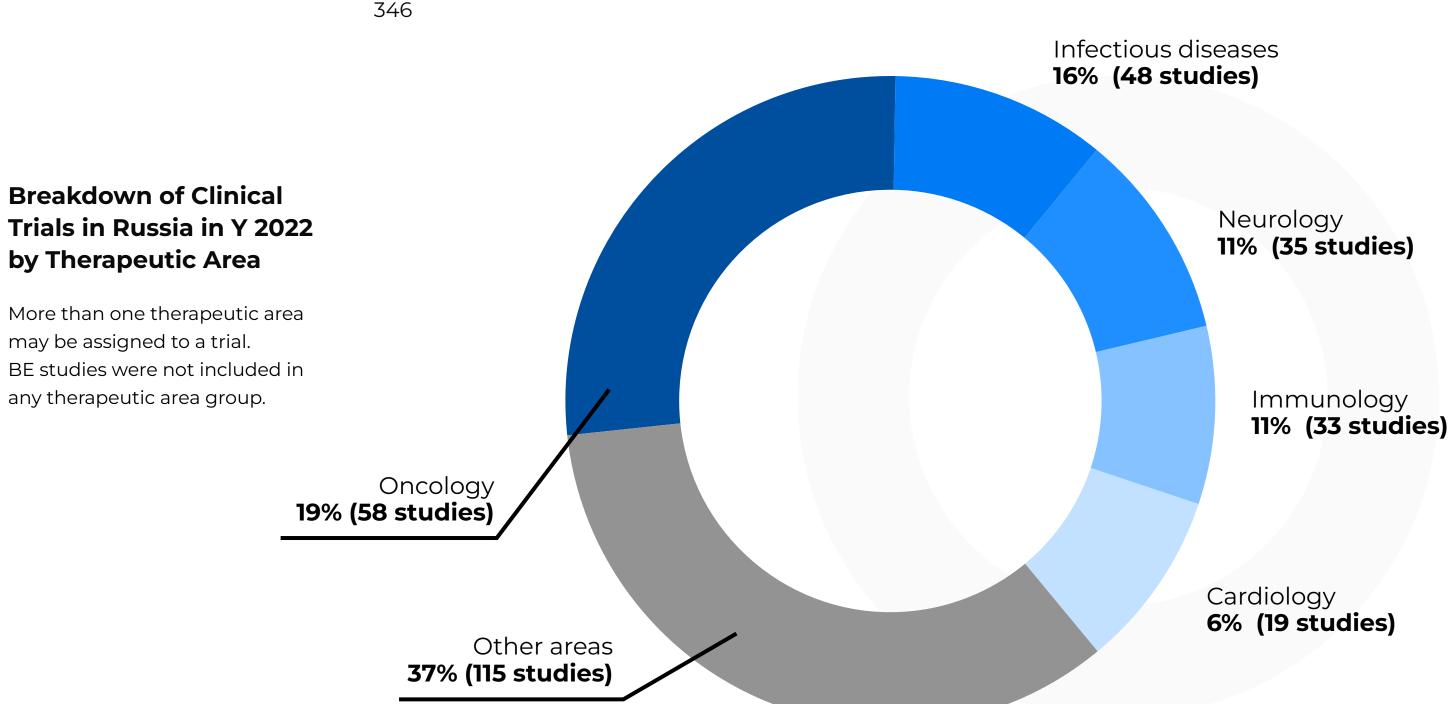


**Percentage Breakdown of Clinical Trials by Type** 



The most prevalent Phase of clinical trials conducted in Russian sites by total number of studies was Phase III. The total number of Phase III trials dropped by 47% – from 346 trials in the Year 2021 to 185 trials in the Year 2022.

The largest number of clinical trials initiated in Russia during the Year 2022 were related to Oncology (58 studies), Infectious diseases (48 studies), Neurology (35 studies), Immunology (33 studies) and Cardiology (19 studies). Other dominant therapy areas include Hematology, Gastroenterology, Endocrinology and Dermatology.



# Sponsor Data

sponsored by pharmaceutical companies from Russia and 27 foreign countries. The combined market share of international pharmaceutical companies involved in the Russian Clinical trials market dropped from 54% to 29% of all studies.

Clinical trials initiated in Russia during the Year 2022 were

Russian sites by international pharmaceutical companies in the Year 2022 was Phase III with 33% share among Phase I – IV studies.

The most prevalent Sponsor's countries of origin in the

The dominant Phase of Clinical trials conducted across

Year 2022 were Russia (526 studies), U.S. (42) and India (29). Other prominent countries include Switzerland (28), Belarus (25), Germany (10) and Slovenia (10).

Observational trials and trials without FDA-defined phases

(from I to IV) were not counted in the following ranking.

### by Sponsor's Country of Origin 100 90 29% 80 54% 70 60 50 40 71% 30 46% 20 10 $\bigcirc$ Y 2021 Y 2022 Russian Sponsors International Sponsors

**Percentage Breakdown of Clinical Trials** 

Combined market share shown as a percentage of both

#### Company Name Subjects NΘ Studies

**Top-10 International Trial Sponsors in Russia in Y 2022** 

			3	
1	Merck	13	957	
2	Novartis	13	534	
3	Hoffmann-La Roche	10	1805	
4	GlaxoSmithKline	6	281	
5	Janssen	5	330	
6	AstraZeneca	5	306	
7	AbbVie	5	247	
8	Novo Nordisk	4	287	
9	Boehringer Ingelheim	3	206	
10	Intra-Cellular Therapies	2	616	
	Combined market share	21%	<b>7</b> %	
Combined market share based on total studies conducted				
both sponsors and CROs.				

Combined market share shown as a percentage of both

international and Russian sponsors. Bio-Equivalence (BE)

studies were not included in this ranking.

## **Top-10 Russian Trial Sponsors in Russia in Y 2022**

international and Russian sponsors.

	No	Company Name	Studies	Subjects
	1	BIOCAD	14	3 682
	2	Microgen	13	1 150
	3	PROMOMED	12	2 625
	4	Gamaleya Research *	9	3 989
	5	Valenta Pharma	9	1964
	6	R-Pharm	8	915
	7	Generium	7	1 197
	8	GeroPharm	4	902
	9	Vertex	4	426
	10	Grotex	4	264
		Combined market share	<b>27</b> %	22%
* Gamaleya Research Institute of Epidemiology and				
	Microbiology			

Subject Data The overall number of subjects enrolled (or planned to be

2022 reached a total of 77,678 subjects – a 42% drop in comparison with the previous year when 132,843 subjects were enrolled. The most prevalent Phase of clinical trials by the number of

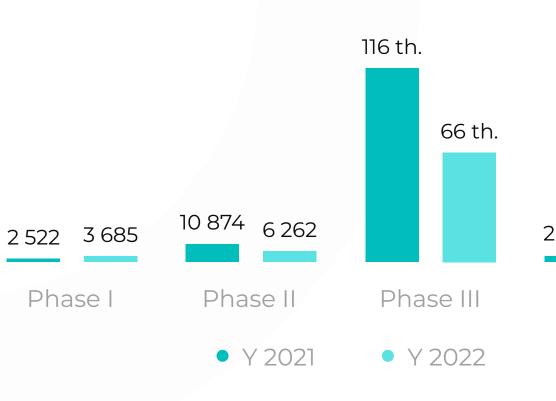
enrolled) in clinical trials initiated in Russia during the Year

participating subjects was Phase III with 85% of all subjects enrolled.

Studies indicated by sponsors as Phase I-II were counted as

Phase II; Phase II-III – as Phase III, Phase III-IV – as Phase IV.

**Breakdown of Number of Subjects Enrolled by Phase** 



# O Research Site Data

#### **Top-5 Russian Research Sites (All Studies) in Y 2022**

No	Site Name	City	No. Studies
1	Ecosafety	Saint-Petersburg	88
2	Clinical Hospital №3	Yaroslavl	72
3	I.M. Sechenov First Moscow State Medical University	Moscow	65
4	X7 Clinical Research	Saint-Petersburg	38
5	Yaroslavl Regional Clinical Narcology Hospital	Yaroslavl	33

Combined market share of these sites

No

Site Name

40%

No. Subjects

No. Studies

# **OCRO Data**

### **Top-10 CROs in Russia** in Y 2022 (Phase I - IV Studies)

Observational Clinical trials and Clinical trials without FDA defined phases (from I to IV) were not included in this ranking.

1	IQVIA	13	907
2	Syneos Health	7	331
3	K-Research	6	615
4	Parexel	5	307
5	PPD	5	113
6	Medical Development Agency	4	851
7	Vita Aeterna	3	866
8	Synergy Research Group	3	444
9	Pharmaceutical Research Associates CIS	3	296
10	MB Quest	3	101
	Combined market share	17%	6%
		No. Studies	No. Subjects
		26	1247

Appr.Date

**Top-5 CROs in Russia** 

in Y	2022 (BE Studies)			_	
	y BE (bioequivalence) studies	10	MB Quest	3	101
	e included in this ranking.		Combined market share	<b>17</b> %	<b>6</b> %
N	lº Site Name			No. Studies	No. Subjects
1	Probiotech			26	1 247
2	Medical Development Age	ncy		10	506
3	X7 Clinical Research			8	378
4	Smooth Drug Developmen	t		8	354
5	Ligand Research			5	400
	Combined market share o	f these o	companies	13%	14%

## O Regulatory Data During Q4 2022 the Center for Drug Evaluation and Five of these 28 drugs (and zero of 5 NMEs) were (or are

Drug (Active Ingredient)

Research (CDER) of the U.S. FDA approved 28 new drugs, including 5 new molecular entities (NME); other approvals concerned new dosages, combinations or manufacturers.

being) studied in clinical trials involving Russian sites. Source: FDA

Company

21.10.2022	Imjudobla (Tremelimumab)	AstraZeneca
25.10.2022	Tecvaylibla (Teclistamab)	Janssen
14.11.2022	Elaherebla (Mirvetuximab Soravtansine)	Immunogen
13.12.2022	Iyuzehnda (Latanoprost)	Thea Pharma
28.12.2022	Briumvibla (Ublituximab)	TG Therapeutics
28.12.2022	Briumvibla (Ublituximab)	TG Therapeutics

(EMA) approved 33 new drugs, including 5 generics, 1 biosimilar and 4 orphan medicines. Drug (Active Ingredient) Appr.Date

In Q4 2022 the Committee for Medicinal Products for

Human Use (CHMP) of the European Medicine Agency

**Source: EMA** 

clinical trials involved Russian sites.

Company

Eighteen of these 33 drugs were (or are being) studied in

13.10.2022	Spevigo (Spesolimab)	Boehringer Ingelheim
13.10.2022	Libtayo (Cemiplimab)	Regeneron
10.11.2022 Eylea (Aflibercept)		Bayer
10.11.2022	Ceprotin (Human Protein C)	Takeda
10.11.2022	Xofluza (Baloxavir Marboxil)	Hoffmann-La Roche
10.11.2022	Lynparza (Olaparib)	AstraZeneca
10.11.2022	Plavix (Clopidogrel Hydrogen Sulfate)	Sanofi
15.12.2022	Imfinzi (Durvalumab)	AstraZeneca
15.12.2022	Tremelimumab AstraZeneca (Tremelimumab)	AstraZeneca
15.12.2022	Dupixent (Dupilumab)	Sanofi
15.12.2022	Triumeq (Dolutegravir Sodium; Lamivudine; Abacavir)	ViiV Healthcare
15.12.2022	Hemlibra (Emicizumab)	Hoffmann-La Roche
15.12.2022	Kerendia (Finerenone)	Bayer
15.12.2022	Imjudo (Tremelimumab)	AstraZeneca
15.12.2022	Enhertu (Trastuzumab Deruxtecan)	Daiichi Sankyo
15.12.2022	Edistride (Dapagliflozin Propanediol Monohydrate)	AstraZeneca
15.12.2022	Forxiga (Dapagliflozin Propanediol Monohydrate)	AstraZeneca
16.12.2022	Adcirca (Tadalafil)	Eli Lilly

### inspections conducted in a Russian investigative sites during the Year 2022.

**About The Orange Paper** 

According to the U.S. FDA data, there were no FDA

### 11/01/2023 there were no Regulatory inspections conducted by Roszdravnadzor during the Year 2022.

close of each year.

According to the Roszdravnadzor quarterly report, as of

# The Orange Paper is a free publication produced by

Synergy Research Group for the pharmaceutical industry since 2007. It pulls together data from numerous public sources into a single brief document to aid decision makers planning to conduct clinical trials.

All of the data within this document are actual on date: 11/01/2023

It is produced quarterly, with an annual summary at the

## **About Synergy Research Group** Synergy Research Group is a contract research organization

From year to year our company is consistently in TOP-10 of

successfully operating in Russia and Kazakhstan since 2002.

market leaders by the numbers of conducted clinical studies and enrolled patients.

The high recruitment rates of the emerging markets combined with innovative technology allows Synergy to offer our clients conduct faster, more cost-effective studies

For all of clinical studies conducted by our company we've set up the highest level of world-class quality both for SOPs and for final study data.

We're continuously working on improvements of our SOPs, study risk management and IT infrastructure and replacing an outdated R&D strategies by novel, more efficient approaches to clinical research.



without sacrificing quality for our clients.