Q3 2020 Research report

During Q3 2020 the MoH of the Russian Federation approved the start of 238 new clinical trials of all types,

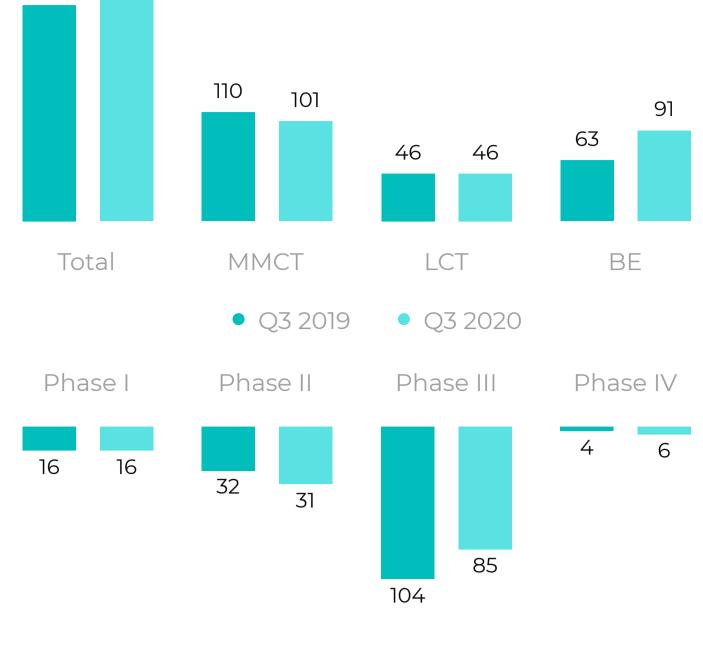
O Trial Data

including local and bioequivalence studies. This represents a 9% year on year growth by the total number of studies. The dominant type of clinical trials conducted across

Russian sites in Q3 2020 were MMCT. The market share of MMCTs decreased from 50% to 42% of the total number of trials. The market share of LCTs remained almost the same with 19% whilst the BE share rose from 29% to 38%.

238 219

Breakdown of Clinical Trials by Type and Phase

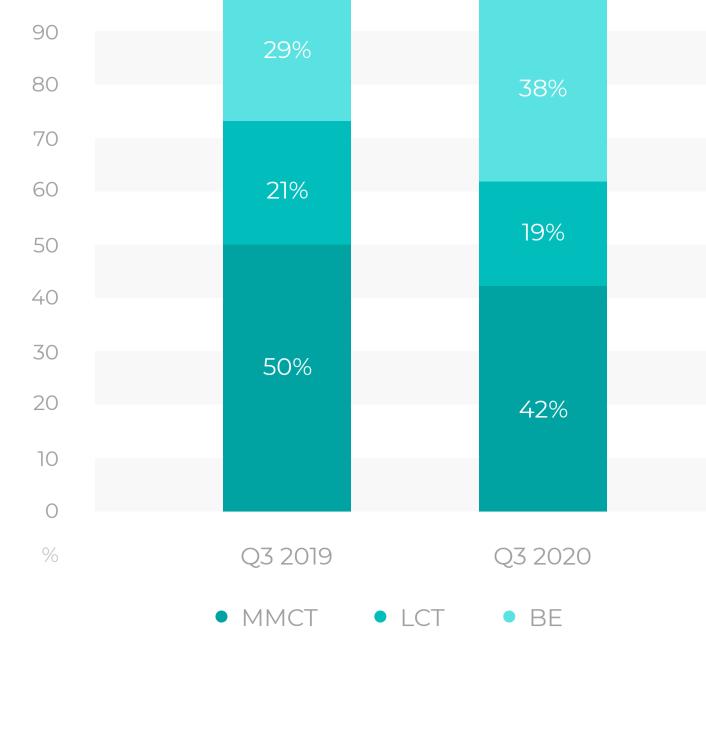


Oncology

30% (44 studies)



Percentage Breakdown of Clinical Trials by Type



104 trials in Q3 2019 to 85 trials in Q3 2020. The largest number of clinical trials initiated in Russia during Q3 2020 were related to Oncology (44 studies), Neurology (25 studies) and Infectious diseases (24 studies). Other dominant therapy areas include Immunology,

The total number of Phase III trials collapsed by 18% – from

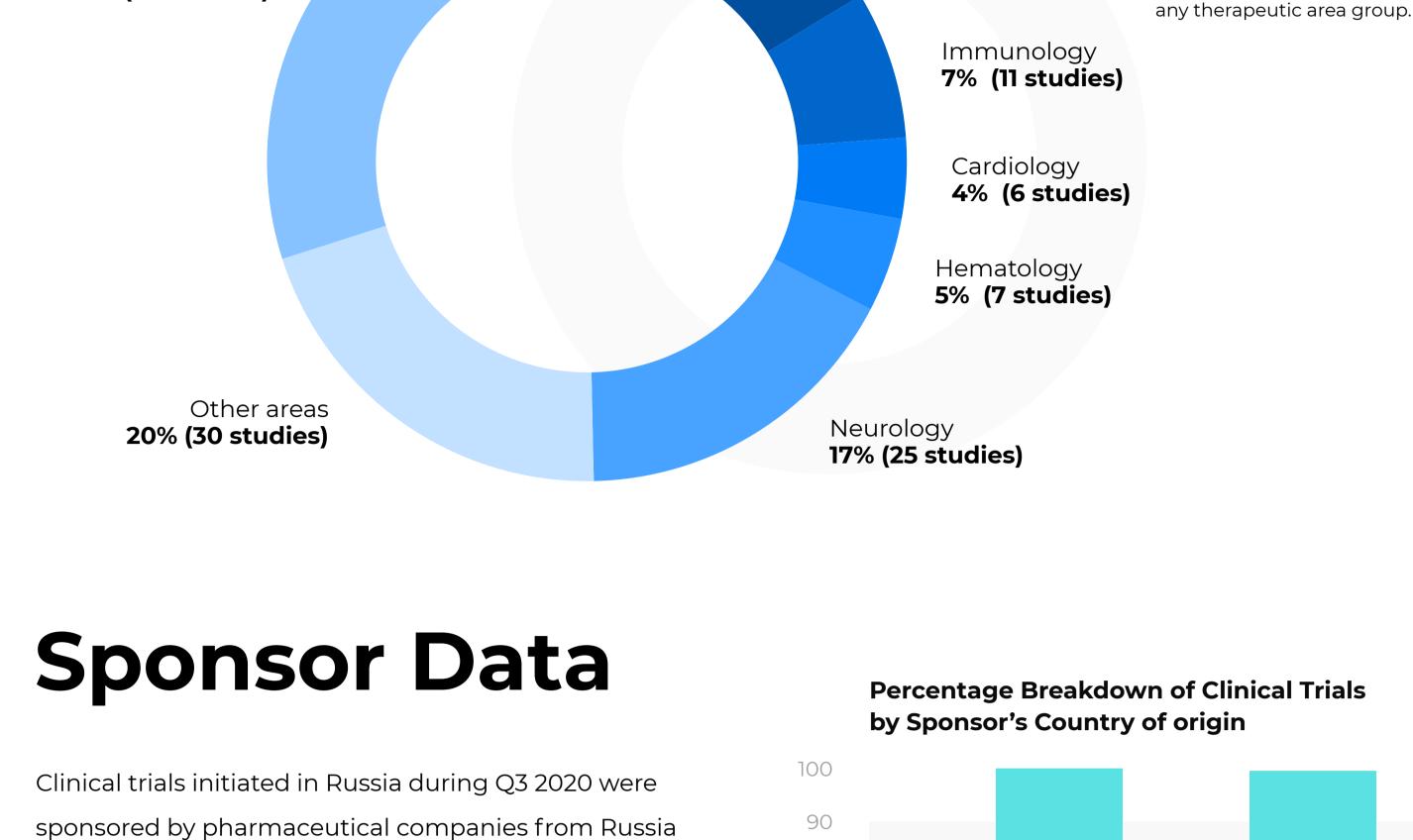
The most prevalent Phase of clinical trials conducted in

Russian sites by total number of studies was Phase III.

Hematology and Cardiology. Infectious diseases **Breakdown of Clinical** 16% (24 studies) **Trials by Therapeutic Area** More than one therapeutic area

may be assigned to a trial.

BE studies were not included in



80

70

 N_{0}

international pharmaceutical companies involved in the Russian Clinical trials market dropped from 64% to 50% of all studies.

The dominant Phase of Clinical trials conducted across Russian sites by international pharmaceutical companies in the Q3 2020 was Phase III with 51% share among Phase I – IV studies. Observational trials and trials without FDA-defined phases (from I to IV) were not counted in the following

ranking. Combined market share shown as a percentage

of both international and Russian sponsors.

Janssen

5

and 22 foreign countries. The combined market share of

Company Name Nº Studies Subjects Hoffman-la Roche 13 844

Top-10 International Trial Sponsors in Russia in Q3 2020

AstraZeneca 8 914 2 3 Merck 7 376 650 GlaxoSmithKline 6

5

450

570 Bayer 4 6 568 7 Genzyme 4 Eli Lilly 210 4 8 Boehringer Ingelheim 175 9 4 Novo Nordisk 230 2 10 **Combined share** 9% **39%**

Subject Data

The overall number of subjects enrolled in clinical trials

initiated in Russia during Q3 2020 reached a total of 57,474

subjects – a 191% jump in comparison with Q3 2019, when

only 19,704 subjects were enrolled. The most prevalent

Phase of clinical trials by the number of participating

subjects was Phase IV with 72% of all subjects enrolled.

60 50 40 30 50% 20 36% 10 0 Q3 2019 Q3 2020 Russian Sponsors International Sponsors

64%

PharmStandard 792 3 **VECTOR** 3 550 3 State Research Center

Top-10 Russian Trial Sponsors in Russia in Q3 2020

Subjects

780

Studies

5

Company Name

PROMOMED

4	Moscow Endocrine Plant	3	340	
5	Materia Medica Holding	2	772	
6	Farmartis International	2	410	
7	PharmaPark	2	383	
8	GeroPharm	2	130	
9	Polysan	2	93	
10	Gamaleya Research Institute	1	40 000	
	Combined share	17 %	77 %	
Breakdown of number of Subjects enrolled by Phase 41 666				

14 332

11 738

Phase III

461

20

20

49%

No. Subjects

1529

330

735

264

290

218

150

108

212

7%

Phase IV

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.

O Research Site D Top-5 Russian research sites (all studies) in Q3 2020 No Site Name First St. Petersburg State Medical University named afte

Ecosafety 2 3 National Oncology Research Center named after N.N. Pe

Types of Medical Care (Oncological)

Combined market share of these sites

4

5

Top-10 CROs in Russia

in Q3 2020 (Phase I - IV studies)

Observational Clinical trials and

phases (from I to IV) were not

included in this ranking.

Top-5 CROs in Russia

in Q3 2020 (BE studies)

Only BE (bioequivalence) studies

were included in this ranking.

Clinical trials without FDA defined

Pilasei	Pliasell	PHase III	Pilasei	V
	• Q3 2019	• Q3 202	20	
ata				
	City		Nio Ctualion	
	City		No. Studies	
er I.P. Pavlov	Saint-Petersbu	ırg	29	
	Saint-Petersbu	ırg	27	
Petrov	Saint-Petersbu	ırg	21	

3 823

1088

Phase I

864

3 206

Phase II

Moscow

Saint-Petersburg

No. Studies

13

7

4

3

2

2

2

2

25%

CRO Data

Russian Oncological Scientific Center named after N.N. Blokhin

St. Petersburg Clinical Research and Practical Center of Specialized

No

2

3

4

10

Site Name

IQVIA

Parexel

iPharma

Covance

Medpace

OST Rus

Pharmaceutical Research Associates

Smooth Drug Development

Combined market share

PSI

PPD

5 6

04/08/2020

05/08/2020

12/08/2020

	Nº	Site Name			No. Studies	No. Subjects
	1	ClinPharm	lnvest		4	190
	2	OST Rus			3	152
	3	ClinPharm	Development		2	90
	4	ChorichPh	arm		2	66
	5	Accellena			2	48
		Combined	I market share of these companies		14%	14%
		110	gulatory Data	a		
					and two of these 10) NMEs were
D	ouring (Q3 2020 the	Center for Drug Evaluation and the U.S. FDA approved 36 new drugs;	Nine of these 36 drugs at tested (or being studied		
D R	ouring (esearc	Q3 2020 the ch (CDER) of	Center for Drug Evaluation and	Nine of these 36 drugs a		
C R 10 a	Ouring (esearc O of the pprova	Q3 2020 the ch (CDER) of em were nev	Center for Drug Evaluation and the U.S. FDA approved 36 new drugs;	Nine of these 36 drugs a tested (or being studied		
C R 10 a	Ouring (esearc O of the pprova	Q3 2020 the ch (CDER) of em were nev als concerned acturers.	Center for Drug Evaluation and the U.S. FDA approved 36 new drugs; w molecular entities (NME); other	Nine of these 36 drugs a tested (or being studied Russian sites.) in clinical trials in	
C R 10 a	ouring (esearc) of the pprova nanufa Appr.	Q3 2020 the ch (CDER) of em were nev als concerned acturers.	Center for Drug Evaluation and the U.S. FDA approved 36 new drugs; w molecular entities (NME); other d new dosages, combinations or	Nine of these 36 drugs at tested (or being studied Russian sites. Source: FDA) in clinical trials in	
C R 10 a	Ouring (esearce) of the pprova nanufa Appr.	Q3 2020 the ch (CDER) of em were new als concerned acturers. Date 7/2020	Center for Drug Evaluation and the U.S. FDA approved 36 new drugs; w molecular entities (NME); other d new dosages, combinations or Drug (Active Ingredient)	Nine of these 36 drugs at tested (or being studied Russian sites. Source: FDA Compan) in clinical trials in	

28/08/2020 Sogroyabla (Somapacitan-BECO) 01/09/2020 Onuregnnda (Azacitidine) 25/09/2020 Xelianznda (Tofacitinib)

Fumarate; Glycopyrrolate)

Xtandinda (Enzalutamide)

Viltepsonda (Viltolarsen)

Blenrepbla (Belantamab Mafodotin-BLMF)

Human Use (CHMP) of the European Medicine Agency (EMA) approved 34 new drugs, including 3 generics, 1 biosimilar and 10 orphan medicines. Appr.Date Drug (Active Ingredient)

In Q3 2020 the Committee for Medicinal Products for

Thirteen of these 34 drugs were (or are being) studied in clinical trials involved Russian sites. **Source: EMA**

Astellas Pharma

GlaxoSmithKline

Nippon Shinyaku

Novo Nordisk

Celgene

Pfizer

Company

23/07/2020	Equidacent (Bevacizumab)	Cent	us Biotherapeutics	
23/07/2020	Crysvita (Burosumab)	Kyow	a Kirin	
23/07/2020	Calquence (Acalabrutinib)	Astra	Zeneca	
17/09/2020	Yervoy (Ipilimumab)	Bristo	ol-Myers Squibb	
17/09/2020	MenQuadfi (Meningococcal Group A, C, W1 Conjugate Vaccine)	Sand Y Sano	fi	
17/09/2020	Lynparza (Olaparib)	Astra	Zeneca	
17/09/2020	Olumiant (Baricitinib)	Eli Lil	ly	
17/09/2020	Tecentriq (Atezolizumab)	Hoffr	mann-La Roche	
17/09/2020	Deltyba (Delamanid)	Otsul	ka	
17/09/2020	Zavicefta (Ceftazidime, Avibactam)	Pfize	r	
17/09/2020	Zejula (Niraparib)	Glaxo	SmithKline	
17/09/2020	Velphoro (Polynuclear Iron(III)-Oxyhydroxide and Starches)	, Sucrose Vifor	Pharma	
17/09/2020	Opdivo (Nivolumab)	Bristo	ol-Myers Squibb	
FDA inspections		Roszdravnadzor inspections		
According to the U.S. FDA data, there was no FDA		According to the Roszdravnadzor quarterly report, as of		
inspections conducted in a Russian investigative site 01/10		01/10/2020 there were no Regulatory inspections		

About The Orange Paper

during Q3 2020.

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.

It is produced quarterly, with an annual summary at the

conducted by Roszdravnadzor during Q3 2020.

close of each year.

01/10/2020

All of the data within this document are actual on date:

About Synergy Research Group Synergy Research Group is a contract research organization successfully operating in Russia, Kazakhstan, Ukraine and

Canada since 2002. Synergy consistently ranks in the top-10 market leaders by

number of conducted clinical studies and enrolled patients. The high recruitment rates of the emerging markets combined with innovative technology allows Synergy to

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We set up the highest level of world-class quality both for SOPs and for final study data in every clinical trial we conduct.

We are continuously improving our SOPs, study risk management and IT infrastructure - and replacing outdated R&D strategies by novel, more efficient approaches to clinical research.

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