

ANNEX 13 R&D and innovation results reached in 2016-2020 by the USERS

No*	R&D and innovation results reached by the users of large research infrastructure	Category	Type**	Year	Reference***
1	Jandová, M., Pavel ŠPONER, Doris VOKURKOVÁ, Peter O. BAUER, Alžběta FILIPOVÁ, Stanislav FILIP a Pavel MĚŘIČKA. NEW CRYOPRESERVATION TECHNOLOGY OF HMSCS:	Excellence Science	peer-reviewed scientific article	2020	https://www.ingentaconnect.com/content/cryo/cryo/2020/0
2	Hýža, Šilhán: Plasma levels of long-acting injectable antipsychotics in outpatient care: a retrospective analysis	Excellence Science	peer-reviewed scientific article	2020	https://www.researchgate.net/publication/342058786_Plasma
3	Zeman D et al.: Cerebrospinal Fluid Oligoclonal Igm Test in Routine Practice: Comparison with Quantitative assessment of intrathecal IgM synthesis.	Excellence Science	peer-reviewed scientific article	2020	https://www.sciencedirect.com/science/article/abs/pii/S0009
4	Magnin A, et al. European survey on national harmonization in clinical research. Learn Health Sys. 2020; 1–9. https://doi.org/10.1002/lrh2.10220	Excellence Science	peer-reviewed scientific article	2020	https://onlinelibrary.wiley.com/doi/full/10.1002/lrh2.10220
5	Dusek J, Motovska Z, Hlinomaz O, Miklik R, Hromadka M, Varvarovsky I, Jarkovsky J, Tousek F, Majtan B, Simek S, Branny M, Mrozek J, Widimsky P; Prague-18 Study	Excellence Science	peer-reviewed scientific article	2020	https://doi.org/10.1016/j.ijcard.2020.06.067
6	Rehakova, D.; Souralova, T.; Koutna, I. Clinical-Grade Human Pluripotent Stem Cells for Cell Therapy: Characterization Strategy. Int. J. Mol. Sci. 2020, 21, 2435.	Excellence Science	peer-reviewed scientific article	2020	https://www.mdpi.com/1422-0067/21/7/2435
7	Farkaš, Š., Šimara P., Řeháková D., Veverková L, Koutná I. Endothelial Progenitor Cells Produced From Human Pluripotent Stem Cells by a Synergistic Combination of Cytol	Excellence Science	peer-reviewed scientific article	2020	https://doi.org/10.1089/ars.2019.7983
8	Sebastiano Giallongo, Daniela Rehakova, Marco Raffaele, Oriana Lo Re, Irena Koutna, and Manlio Vinciguerra.Redox and Epigenetics in Human Pluripotent Stem Cells Diff	Excellence Science	peer-reviewed scientific article	2020	https://doi.org/10.1038/s41375-020-0882-1
9	Machova Polakova, K., Zizkova, H., Zuna, J. et al. Analysis of chronic myeloid leukaemia during deep molecular response by genomic PCR: a traffic light stratification mode	Excellence Science	peer-reviewed scientific article	2020	https://doi.org/10.1007/s00018-019-03397-7
10	Čičátková P, Žáčková D.Vysazování inhibitorů tyrozinkináz u pacientů s chronickou myeloidní leukémií ve studiích a klinické praxi. Transfuzie a hematologie dnes, Praha: Č	Excellence Science	peer-reviewed scientific article	2020	https://pubmed.ncbi.nlm.nih.gov/32117783/
11	Gregor, T., Bosakova, M.K., Nita, A. et al. Elucidation of protein interactions necessary for the maintenance of the BCR–ABL signaling complex. Cell. Mol. Life Sci. 77, 3885	Excellence Science	peer-reviewed scientific article	2020	https://pubmed.ncbi.nlm.nih.gov/32117783/
12	Polaskova K, Merta T, Martinckova A, Zapletalova D, Kyr M, Mazanek P, Krenova Z, Mudry P, Jezova M, Tuma J, Skotakova J, Cervinkova I, Valik D, Zdrzilova-Dubská L, N	Excellence Science	peer-reviewed scientific article	2020	https://pubmed.ncbi.nlm.nih.gov/32117783/
13	Tomáš Horňák, Lukáš Semerád, Daniela Žáčková, Barbora Weinbergerová, Zuzana Šustková, Jiřina Procházková, Petra Bělohávková, Lukáš Stejskal, Peter Rohoň, Edgar Fa	Excellence Science	peer-reviewed scientific article	2020	https://pubmed.ncbi.nlm.nih.gov/32117783/
14	Reda G, et al. Venetoclax penetrates in cerebrospinal fluid and may be effective in chronic lymphocytic leukemia with central nervous system involvement.	Excellence Science	peer-reviewed scientific article	2019	https://www.hematologica.org/article/view/8914
15	Magnin A, et al. European survey on national training activities in clinical research. Trials, volume 20, Article number: 616 (2019)	Excellence Science	peer-reviewed scientific article	2019	https://trialsjournal.biomedcentral.com/articles/10.1186/s130
16	VALIS, Martin, David HERMAN, Nela VANOVA, et al. The Concentration of Memantine in the Cerebrospinal Fluid of Alzheimer’s Disease Patients and Its Consequence to C	Excellence Science	peer-reviewed scientific article	2019	https://pubmed.ncbi.nlm.nih.gov/31555132/
17	Tabi K, et al. Mobile Apps for Medication Management: Review and Analysis.JMIR Mhealth Uhealth. 2019 Sep 11;7(9):13608. doi: 10.2196/13608. IF 4,3 Q1	Excellence Science	peer-reviewed scientific article	2019	https://pubmed.ncbi.nlm.nih.gov/31512580/
18	Obermannova R, et al. (2019) High prevalence of severe hypovitaminosis D in patients with advanced gastric cancer treated with first-line chemotherapy with or	Excellence Science	peer-reviewed scientific article	2019	https://www.sciencedirect.com/science/article/pii/S09598049
19	Holubcová Z, et al. Egg maturity assessment prior to ICSI prevents premature fertilization of late-maturing oocytes. J Assist Reprod Genet 36, 445–452 (2019). https://doi.org/10.1007/s10815-018-	Excellence Science	peer-reviewed scientific article	2019	https://link.springer.com/article/10.1007/s10815-018-
20	EISELLEOVÁ, Livia, Viktor LUKJANOV, Šimon FARKAŠ, David SVOBODA, Karel ŠTĚPKA a Irena KOUTNÁ. The role of RNA Polymerase II contiguity and long-range interaction	Excellence Science	peer-reviewed scientific article	2019	https://www.hindawi.com/journals/sci/2019/1375807/
21	Andrew D.J. Pearson, Nicole Scobie, Koenraad Norga, Franca Ligas, Davy Chiodin, Amos Burke, Veronique Minard-Colin, Peter Adamson, Lynley V. Marshall, Arun	Excellence Science	peer-reviewed scientific article	2019	https://doi.org/10.1016/j.ejca.2019.01.013
22	Špinarová M, et al. New echocardiographic parameters in the diagnosis of heart failure with preserved ejection fraction. Int J Cardiovasc Imaging 34, 229–235 (2018). htt	Excellence Science	peer-reviewed scientific article	2018	https://link.springer.com/article/10.1007/s10554-017-
23	ŠPONER, Pavel, Tomáš KUČERA, Jindra BRTKOVÁ, et al. Comparative Study on the Application of Mesenchymal Stromal Cells Combined with Tricalcium Phosphate Scaffo	Excellence Science	peer-reviewed scientific article	2018	https://journals.sagepub.com/doi/full/10.1177/09636897187
24	Landa L, et al. (2018) Medical cannabis in the treatment of cancer pain and spastic conditions and options of drug delivery in clinical practice. Biomedical Papers, Olomou	Excellence Science	peer-reviewed scientific article	2018	https://pubmed.ncbi.nlm.nih.gov/29560966/
25	Juřica J, et al. Terapeutické monitorování sunitinibu. Acta medicae, ERA Média s.r.o., 2018, roč. 2018, č. 13, s. 12-16. ISSN 1805-398X.	Excellence Science	peer-reviewed scientific article	2018	http://www.actamedicae.cz/literatura/AM_132018_literatur
26	Dražanová E, et al.Poly(I:C) model of schizophrenia in rats induces sex-dependent functional brain changes detected by MRI that are not reversed by aripiprazole	Excellence Science	peer-reviewed scientific article	2018	https://www.sciencedirect.com/science/article/abs/pii/S0361
27	Chlapek P, Slavikova V, Mazanek P, Sterba J, Veselska R. Why Differentiation Therapy Sometimes Fails: Molecular Mechanisms of Resistance to Retinoids. Int J Mol Sci.	Excellence Science	peer-reviewed scientific article	2018	https://pubmed.ncbi.nlm.nih.gov/29301374/
28	Kodytkova D, Bajciová V, Krejčí D, Zapletalova M, Dusek V, Jarkovsky J, Muzik J, Klimes D, Sary J, Smelhaus V, Vrzalova A, Janotova I, Sterba J, Dusek L. Trends in	Excellence Science	peer-reviewed scientific article	2018	https://pubmed.ncbi.nlm.nih.gov/30064234/
29	Dovrtělová G, et al. Effect of Endocannabinoid Oleamide on Rat and Human Liver Cytochrome P450 Enzymes in In Vitro and In Vivo Models. Drug Metabolism and Dispos	Excellence Science	peer-reviewed scientific article	2018	https://dmd.aspetjournals.org/content/46/6/913
30	Frelich M, Divák J, Vodička V, Masárová M, Jor O, Gál R. Dexamethasone Reduces the Incidence of Postoperative Nausea and Vomiting in Children Undergoing Endoscopy	Excellence Science	peer-reviewed scientific article	2018	https://pubmed.ncbi.nlm.nih.gov/30465722/
31	Mikolášek P, et al. (2017)Anti-NMDAR encephalitis in children – case study. Cesk Slov Neurol N 2017; 80/113(2): 224-227. doi: 10.14735/amcnn2017224	Excellence Science	peer-reviewed scientific article	2017	https://www.csnn.eu/en/journals/czech-and-slovak-neurology
32	Malušková d, et al. (2017) Epidemiology of Multiple Myeloma in the Czech Republic. Klin Onkol 2017; 30(S2): 35-42. DOI: 10.14735/amko20172535.	Excellence Science	peer-reviewed scientific article	2017	https://www.linkos.cz/english-summary/klinicka-onkologie-
33	Ludka O, et al. Differential likelihood of NSTEMI vs STEMI in patients with sleep apnea. International Journal of Cardiology, Clare (Ireland): Elsevier Ireland Ltd., 2017, vol.	Excellence Science	peer-reviewed scientific article	2017	https://www.internationaljournalofcardiology.com/article/S01
34	Ohmann C, et al. Sharing and reuse of individual participant data from clinical trials: principles and recommendations. BMJ Open 2017;7:e018647. doi: 10.1136/bmjopen	Excellence Science	peer-reviewed scientific article	2017	https://bmjopen.bmj.com/content/7/12/e018647
35	Ohmann c, et al. Raising standards in clinical research – The impact of the ECRIN data centre certification programme, 2011–2016	Excellence Science	peer-reviewed scientific article	2017	https://www.sciencedirect.com/science/article/pii/S24518654
36	Múdry P, et al. Case report: rapid and durable response to PDGFR targeted therapy in a child with refractory multiple infantile myofibromatosis and a heterozygous germ	Excellence Science	peer-reviewed scientific article	2017	https://bmccancer.biomedcentral.com/articles/10.1186/s128
37	Horská K, et al. Aripiprazole-induced adverse metabolic alterations in poly(I:C) neurodevelopmental model of schizophrenia in rats. Neuropharmacology	Excellence Science	peer-reviewed scientific article	2017	https://www.sciencedirect.com/science/article/abs/pii/S0028
38	Brinkman DJ, et al; Education Working Group of the European Association for Clinical Pharmacology and Therapeutics (EACPT); its affiliated Network of Teachers in Pharm	Excellence Science	peer-reviewed scientific article	2017	https://pubmed.ncbi.nlm.nih.gov/29205299/
39	Vychytilova-Faltejskova P, et al. MIR-215-5p is a tumor suppressor in colorectal cancer targeting EGFR ligand epiregulin and its transcriptional inducer HOXB9.Oncogenes	Excellence Science	peer-reviewed scientific article	2017	https://europepmc.org/article/pmc/pmc5868056
40	Duchnowska R, et al. Predictive value of quantitative HER2, HER3 and p95HER2 levels in HER2-positive advanced breast cancer patients treated with lapatinib following p	Excellence Science	peer-reviewed scientific article	2017	https://europepmc.org/article/pmc/5732794
41	Moreno L, et al. (2017) Accelerating drug development for neuroblastoma - New Drug Development Strategy: an Innovative Therapies for Children with Cancer,	Excellence Science	peer-reviewed scientific article	2017	https://pubmed.ncbi.nlm.nih.gov/28604107/
42	Kopeckova K, et al. (2017) Regorafenib in the Real-Life Clinical Practice: Data from the Czech Registry. Targ Oncol 12, 89–95 (2017). https://doi.org/10.1007/s11523-016-	Excellence Science	peer-reviewed scientific article	2017	https://link.springer.com/article/10.1007/s11523-016-0458-1
43	Motovska Z, Hlinomaz O, Kala P, Hromadka M, Knot J, Varvarovsky I, Dusek J, Jarkovsky J, Miklik R, Rokyta R, Tousek F, Kramarikova P, Svoboda M, Majtan B, Simek S, Bra	Excellence Science	peer-reviewed scientific article	2017	https://pubmed.ncbi.nlm.nih.gov/29154813/
44	Nagy A, et al. Occurrence of implantable cardioverter-defibrillator therapy in clinical practice. Cor et Vasa 2017, 59(3):e215-e221 DOI: 10.1016/j.crvasa.2016.12.014	Excellence Science	peer-reviewed scientific article	2017	http://e-corevasa.cz/artkey/cor-201703-0008_occurrence-of-
45	Ludka O, et al. Kvalita života pa-cientů s akutní dekompenzací chronického systolického srdečního selhání hodnocená pomocí standardizovaných dotazníků. Kardiologická	Excellence Science	peer-reviewed scientific article	2016	https://www.kardiologickarevue.cz/casopisy/kardiologicka-
46	Petráková K, et al. Sledování cirkulujících hladin estradiolu u pacientek s karcinomem prsu léčených inhibitory aromatázy – přínos v klinické praxi. Klinická onkologie, rok:	Excellence Science	peer-reviewed scientific article	2016	https://www.linkos.cz/english-summary/klinicka-onkologie-
47	Klement GL, et al. Future paradigms for precision oncology. Oncotarget. 2016; 7: 46813-46831.	Excellence Science	peer-reviewed scientific article	2016	https://www.oncotarget.com/article/9488/text/
48	Bílek O, et al. Nematobuněčný karcinom plic - od imunobiologie k imunoterapii [Non-Small Cell Lung Cancer - from Immunobiology to Immunotherapy]. Klin Onkol. 2016	Excellence Science	peer-reviewed scientific article	2016	https://pubmed.ncbi.nlm.nih.gov/27846725/
49	Adam J, et al. Current Progresses in Developing PET Radiopharmaceuticals for Patients in the Czech Republic. Klin Onkol. 2016 Fall;29(Supplementum 4):95-100. JRec	Excellence Science	peer-reviewed scientific article	2016	https://pubmed.ncbi.nlm.nih.gov/27846727/
50	Duchnowska R, et al.Group Author(s): CEEOG. Immunohistochemical prediction of lapatinib efficacy in advanced HER2-positive breast cancer patients. Oncotarget 2016;	Excellence Science	peer-reviewed scientific article	2016	https://www.oncotarget.com/article/6375/

* The large research infrastructures approved by the Government of the Czech Republic for public funding in 2016-2022 are requested to fill in 50 top-class R&D and innovation results reached by their user community in the open access regime in 2016-2020. The large research infrastructures approved by the Government of the Czech Republic for public funding in 2019-2022 are requested to fill in 20 top-class R&D and innovation results reached by their user community in the open access regime in 2019-2020. In this case delete the unnecessary lines pre-determined in the table.

** Excellent Science = Publication results: peer-reviewed scientific article; book; chapter in a book; paper in proceedings. Application = Non-publication results: patent; pilot plant; verified technology; variety; breed; utility model; industrial design; prototype; functioning sample; results projected into legislation and standards; results projected into guidelines and other non-legislative regulations; results projected into approved strategic and/or policy documents by state or by public administration bodies; methodology; medical procedure; conservation procedure; specialised map; software; specialised public database; research report; summary research report; audio-visual work; holding an exhibition; holding an exhibition with a critical catalogue; holding a conference; holding a workshop; other results.

with a brief overview, noting a significance, noting a weakness, other relevant

***** Add a reference to [website link](#), where the result is downloadable if the result is open-accessible and/or insert any other remark you consider appropriate.**