**Department**

Pulmonology Department of the N.V. Sklifosovsky Institute of Clinical Medicine

Avdeev Sergey Nikolaevich, MD, Academician of the Russian Academy of Sciences, Professor, Head of the Department of Pulmonology

<https://www.sechenov.ru/univers/all/124906/?ysclid=lzrg5tgpvx938102788>

**Scientific interests**: Clinical Medicine and Public Health

**Research project:**

Study of cough syndrome in patients with ILD.

**Topics and content of the research project:**

Study of cough syndrome in patients with ILD.

Supervisor – Avdeev S.N., MD, Academician of the Russian Academy of Sciences, Professor, Head of the Department of Pulmonology

<https://www.sechenov.ru/univers/all/124906/?ysclid=lzrg5tgpvx938102788>

Pulmonology

Working languages: Russian, English

**Aims and Objectives of the research project:**

Study of cough characteristics in patients with ILD

Collection and analysis of clinical and laboratory data in patients with ILD

Methods used:

Application of new methods for cough assessment in hospital settings

**Position Description:**

Collection of clinical, laboratory and instrumental data from ILD patients, analysis of the obtained data using modern methods of statistical analysis of biological data, writing articles

Salary, position, contract term: 0,5 of the rate; medical researcher; 1 year.

Salary: 40-60 thousand rubles (based on interview results).

Requirement for a postdoc: Availability of publications on the topic of scientific research in leading scientific journals, VAK journals, on electronic platforms (RSCI, Scopus, WoS), skills in conducting statistical analysis of biological data.

Expected work results: 3 publications based on research results in Scopus journals, presentations at scientific conferences with international participation.



Avdeev Sergey Nikolaevich

MD, Academician of the Russian Academy of Sciences, Professor, Head of the Department of Pulmonology Scientific and pedagogical experience more than 30 years.

Scientific interests: pulmonology

<https://www.elibrary.ru/author_profile.asp?id=194984>

<https://www.scopus.com/authid/detail.uri?authorId=7003292838>

<https://www.webofscience.com/wos/author/record/G-6950-2015>

**Topics and content of research project and educational activities**

Current problems of pulmonology

**Supervisor’s main publications**

Kreuter M., Polke M., Walsh S.L.F. et al. Acute exacerbation of idiopathic pulmonary fibrosis: International survey and call for harmonisation. European Respiratory Journal. 2020; 55(4): 1901760. DOI: 10.1183/13993003.01760-2019.

Neupane B., Sydykov A., Pradhan K. et al. Influence of gender in monocrotaline and chronic hypoxia induced pulmonary hypertension in obese rats and mice. Respiratory Research. 2020; 21(1): 136. DOI: 10.1186/s12931-020-01394-0.

Avdeev S., Tsareva N., Nekludova G. Inhaled Treprostinil in Group 3 Pulmonary Hypertension. New England Journal of Medicine. 2021; 384(19): 1871-. DOI: 10.1056/NEJMc2103465.

Tsareva N.A., Avdeev S.N., Kosanovic D. et al. Inhaled iloprost improves gas exchange in patients with COVID-19 and acute respiratory distress syndrome. Critical Care. 2021; 25(1): 258. DOI: 10.1186/s13054-021-03690-7.

Avdeev S.N., Merzhoeva Z.M., Samsonova M.V. et al. A 61-Year-Old Woman With Insidious Dyspnea and Diffuse Cystic Lung Disease. Chest. 2021; 160(2): e199-e203. DOI: 10.1016/j.chest.2021.02.044.

Munblit D., Nekliudov N.A., Bugaeva P. et al. Stop COVID Cohort: An Observational Study of 3480 Patients Admitted to the Sechenov University Hospital Network in Moscow City for Suspected Coronavirus Disease 2019 (COVID-19) Infection. Clinical Infectious Diseases. 2021; 73(1): 1-11. DOI: 10.1093/cid/ciaa1535.

Ignatova G.L., Avdeev S.N., Antonov V.N. Comparative effectiveness of pneumococcal vaccination with PPV23 and PCV13 in COPD patients over a 5-year follow-up cohort study. Scientific Reports. 2021; 11(1): 15948. DOI: 10.1038/s41598-021- 95129-w.

Polke M., Kondoh Y., Wijsenbeek M. et al. Management of Acute Exacerbation of Idiopathic Pulmonary Fibrosis in Specialised and Non-specialised ILD Centres Around the World. Frontiers in Medicine. 2021; Vol.8: 699644. DOI: 10.3389/fmed.2021.699644.

Avdeev S.N., Yaroshetskiy A.I., Nuralieva G.S. et al. High-flow nasal cannula is not more effective than conventional oxygen therapy for acute exacerbation of COPD with mild hypercapnia: we are not sure. Critical Care. 2022; 26(1): 156. DOI: 10.1186/s13054-022-04022-z.

Pazukhina E., Andreeva M., Spiridonova E. et al. Prevalence and risk factors of post-COVID-19 condition in adults and children at 6 and 12 months after hospital discharge: a prospective, cohort study in Moscow (StopCOVID). BMC Medicine. 2022; 20(1): 244. DOI: 10.1186/s12916-022-02448-4.

Ratchina S., Bobylev A., Lazarev P. et al. Biomarker value in the diagnosis of community‐acquired pneumonia with concomitant chronic heart failure. Journal of Clinical Medicine. 2021; 10(19): 4570. DOI: 10.3390/jcm10194570.

Sydykov A., Petrovic A., Maripov A.M. et al. Circulating Microparticles Are Differentially Increased in Lowlanders and Highlanders with High Altitude Induced Pulmonary Hypertension during the Cold Season. Cells. 2022; 11(19): 2932. DOI: 10.3390/cells11192932.

Avdeev S., Voznesenskiy N., Boldina M. et al. SABA Overuse in Russia – Burden and Possible Causes: An Analysis of the Russian Population in the SABINA III (SABA use IN Asthma) Study. Journal of Asthma and Allergy. 2022; Vol.15: 371-379. DOI: 10.2147/JAA.S350393.

Valipour A., Aisanov Z., Avdeev S. et al. Recommendations for COPD management in Central and Eastern Europe. Expert Review of Respiratory Medicine. 2022; 16(2): 221-234. DOI: 10.1080/17476348.2021.2023498.

Avdeev S.N., Vizel A.A., Abrosimov V.N. et al. Management of cough in patients with chronic obstructive pulmonary disease: Results of the multicenter randomized placebo-controlled clinical trial. International Journal of Chronic Obstructive Pulmonary Disease. 2021; Vol.16: 1243-1253. DOI: 10.2147/COPD.S292109.

Avdeev S.N., Trushenko N.V., Chikina S.Y. et al. Beneficial effects of inhaled surfactant in patients with COVID-19-associated acute respiratory distress syndrome. Respiratory Medicine. 2021; Vol.185: 106489. DOI: 10.1016/j.rmed.2021.106489.

Valipour A., Avdeev S., Barczyk A. et al. Therapeutic success of tiotropium/olodaterol, measured using the clinical COPD questionnaire (CCQ), in routine clinical practice: A multinational non-interventional study. International Journal of Chronic Obstructive Pulmonary Disease. 2021; Vol.16: 615-628. DOI: 10.2147/COPD.S291920.

Avdeev S., Aisanov Z., Arkhipov V. et al. Withdrawal of inhaled corticosteroids in COPD patients: Rationale and algorithms. International Journal of Chronic Obstructive Pulmonary Disease. 2019; Vol.14: 1267-1280. DOI: 10.2147/COPD.S207775.

Papi A., Avdeev S., Calverley P.M.A. et al. Use of mucolytics in COPD: A Delphi consensus study. Respiratory Medicine. 2020; Vol.175: 106190. DOI: 10.1016/j.rmed.2020.106190.

Sydykov A., Maripov A., Muratali Uulu K. et al. Pulmonary Vascular Pressure Response to Acute Cold Exposure in Kyrgyz Highlanders. High Altitude Medicine and Biology. 2019; 20(4): 375-382. DOI: 10.1089/ham.2019.0046.

Ovsyannikov E.S., Avdeev S.N., Budnevsky A.V., Shkatova Y.S. Influence of anxiety/depression on the subjective evaluation of cough in patients with chronic obstructive pulmonary disease and obesity. Medicina (Kaunas, Lithuania). 2019; 55(5): 134. DOI: 10.3390/medicina55050134.

Hadzic S., Wu C.-Y., Avdeev S. et al. Lung epithelium damage in COPD – An unstoppable pathological event?. Cellular Signalling. 2020; Vol.68: 109540. DOI: 10.1016/j.cellsig.2020.109540.

Avdeev S.N., Trushenko N.V., Tsareva N.A. et al. Anti-IL-17 monoclonal antibodies in hospitalized patients with severe COVID-19: A pilot study. Cytokine. 2021; Vol.146: 155627. DOI: 10.1016/j.cyto.2021.155627.

Avdeev S.N., Nuralieva G.S., Soe A.K. et al. Comparison of Vibrating Mesh and Jet Nebulizers during Noninvasive Ventilation in Acute Exacerbation of Chronic Obstructive Pulmonary Disease. Journal of Aerosol Medicine and Pulmonary Drug Delivery. 2021; 34(6): 358-365. DOI: 10.1089/jamp.2020.1665.

Gredic M., Karnati S., Ruppert C. et al. Combined Pulmonary Fibrosis and Emphysema: When Scylla and Charybdis Ally. Cells. 2023; 12(9): 1278. DOI: 10.3390/cells12091278.

Trushenko N.V., Suvorova O.A., Nekludova G.V. et al. Predictors of Pulmonary Hypertension and Right Ventricular Dysfunction in Patients with Hypersensitivity Pneumonitis. Life. 2023; 13(6): 1348. DOI: 10.3390/life13061348.

Pakhomova A., Pershina O., Bochkov P. et al. Anti-Inflammatory and Antifibrotic Potential of Longidaze in Bleomycin-Induced Pulmonary Fibrosis. Life. 2023; 13(9): 1932. DOI: 10.3390/life13091932.

Athanazio R.A., Villada L.B., Avdeev S.N. et al. Rate of severe exacerbations, healthcare resource utilisation and clinical outcomes in patients with COPD in low-income and middle-income countries: results from the EXACOS International Study. BMJ Open Respiratory Research. 2024; 11(1): e002101. DOI: 10.1136/bmjresp-2023-002101.

Kosanovic D., Avdeev S.N., Milovanov A.P., Chernyaev A.L. Northern Pulmonary Hypertension: A Forgotten Kind of Pulmonary Circulation Pathology. Life. 2024; 14(7): 875. DOI: 10.3390/life14070875.

Mustafina M., Silantyev A., Krasovskiy S. et al. Identification of Exhaled Metabolites Correlated with Respiratory Function and Clinical Features in Adult Patients with Cystic Fibrosis by Real-Time Proton Mass Spectrometry. Biomolecules. 2024; 14(9): 1189. DOI: 10.3390/biom14091189.

**Patents**

Patent No. 2776535 dated July 21, 2022. Russian Federation. Method for rapid detection of coronavirus infection COVID-19 using the method of spectral analysis of cough sounds. Budnevsky A.V., Ovsyannikov E.S., Avdeev S.N., Choporov O.N., Maksimov A.V., Kozhevnikova S.A., Pertsev A.V., Fegelman S.N., Savushkina I.A.

Patent No. 2745535 dated March 26, 2021. Russian Federation. Method for treating COVID-19 pneumonia. Avdeev S.N., Bautin A.E., Seyliev A.A., Rosenberg O.A.

Patent No. 124900 dated April 21, 2021. Russian Federation. Scheme of the algorithm for treating patients with acute bronchitis. Antipushina D.N., Avdeev S.N., Rachina S.A., Smirnova M.I., Drapkina O.M.

Patent No. 125357 dated 05/20/2021. Russian Federation. Scheme of the algorithm for selecting antibacterial therapy for exacerbation of chronic obstructive pulmonary disease. Antipushina D.N., Avdeev S.N., Rachina S.A., Smirnova M.I., Drapkina O.M.

Certificate of state registration of the computer program No. 2022665037 dated 07/21/22. Russian Federation. Cough\_Neural\_Server -2.3. Budnevsky A.V., Ovsyannikov E.S., Avdeev S.N., Rezova N.V., Alekseeva N.G., Feigelman S.N., Choporov O.N., Kurgalin S.D., Maksimov A.V.

Certificate of state registration of the computer program No. 2022665391 dated 05.08.22. Russian Federation. Spectral analysis of cough – 1.3. Budnevsky A.V., Ovsyannikov E.S., Avdeev S.N., Rezova N.V., Alekseeva N.G., Feigelman S.N., Choporov O.N., Kurgalin S.D., Maksimov A.V.

Certificate of state registration of the computer program No. 2019611543 dated 09.01.2019. Cough\_Client - 2.0. Budnevsky A.V., Ovsyannikov E.S., Maksimov A.V., Kurgalin S.D., Aristov P.I., Avdeev S.N., Kontsevaya A.V.

Certificate of state registration of the computer program No. 2018666720 dated 12/20/2018. Program monitoring cough for Server - 2.0. Budnevsky A.V., Ovsyannikov E.S., Maksimov A.V., Kurgalin S.D., Aristov P.I., Avdeev S.N., Rezova N.V.

Database protected by copyright No. 2024620289 dated 01/18/2024. "Dataset (data set) of Sechenov University for diagnosing chronic obstructive pulmonary disease (COPD)". Lebedev G.S., Fartushny E.N., Avdeev S.N., Tsareva N.A., Svistunov A.A.

Copyrighted database No. 2023624710 dated 12/18/2023. "Dataset of Sechenov University for diagnosing lung cancer." Lebedev G.S., Fartushny E.N., Avdeev S.N., Martel I.I., Svistunov A.A.

Computer program No. 2023688258 dated 12/21/2023. "Information system for creating data sets (data sets) for diagnosing diseases." Lebedev G.S., Fartushny E.N., Avdeev S.N., Svistunov A.A.

Software for Determining the Spectrum of Volatile Organic Compounds in Exhaled Air Using Proton Mass Spectrometry in Patients with Cystic Fibrosis. No. 2024666122 dated July 10, 2024. Mustafina M.Kh., Suvorov A.Yu., Silantyev A.S., Gognievа D.G., Bykova A.A., Abdullaev M.G., Chomakhidze P.Sh., Naumenko Zh.K., Chernyak A.V., Krasovsky S.A., Neklyudova G.V., Avdeev S.N., Betelin V.B., Kopylov F.Yu., Syrkin A.L.

Database of Exhaled Air Mass Spectrometry Results in Patients with Cystic Fibrosis. No. 2024625208 dated November 15, 2024 Mustafina M.Kh., Suvorov A.Yu., Silantyev A.S., Gognieva D.G., Bykova A.A., Abdullaev M.G., Chomakhidze P.Sh. (RU), Naumenko Zh.K., Chernyak A.V., Krasovsky S.A., Neklyudova G.V., Avdeev S.N., Betelin V.B. (RU), Kopylov F.Yu., Syrkin A.L.

**Experience of scientific supervision**

10 PhD theses and 7 MD theses were defended under the supervision.

There are 5 graduate students and applicants working under the supervision.

**Опыт преподавания**

Course list:

Current problems of pulmonology