myeloma and one had monoclonal gammopathy of renal significance. These associations reinforce why accurate subtyping matters–treatment depends on it. In AA, the focus is on controlling the underlying inflammation; in AL, it is about targeting the plasma cell clone.

Conclusion. In this small cohort, AA and AL renal amyloidosis presented with distinct profiles despite sharing the same basic pathology. AA patients were younger but had more advanced chronic kidney disease, more glomerulosclerosis, and a higher likelihood of needing dialysis. AL patients, though older, generally had better preserved glomerular architecture. These differences have real clinical implications: they affect prognosis, guide treatment choices, and underscore the value of a careful histopathological workup. Accurate subtyping–integrating histology, IHC, and clinical context–remains essential for optimal patient management.

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DYNAMICS OF PATENTING INVENTIONS ON THE PROBLEM OF CARDIAC ANATOMY

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Introduction. In the process of studying and analyzing literature on the research topic in authoritative databases (Google Scholar, PubMed, Scopus), more than 13 thousand scientific publications were identified [1-5]. Echocardiography has found wide application in studying the anatomy of the heart in normal and pathological conditions [6, с. 274].

However, no patent information reviews were found in the literature on the research topic. It should be emphasized that patent information is an important part of scientific and technical information, as it reflects the results of research and development work aimed at developing new or improving known methods, devices or substances that are world novel and protected by patents.

Purpose: to analyze the contribution of inventors from countries of the world community to the problem of cardiac anatomy.

Research methods. To achieve this goal, a patent search was carried out in the PATENTSCOPE search engine created by the World Intellectual Property Organization (https://patentscope.wipo.int/search/en/search.jsf). This system provides access to international patent documents in accordance with the Patent Cooperation Treaty (PCT), European Patent Office (EPO), as well as to patent documents from regional and national funds. Patent search results are presented as of March 23, 2026.

Results and discussion. As a result of the analysis in the PATENTSCOPE database for the specified period of time, 467 patents were identified relating to various aspects of the research topic. In the last ten-year period, 282 patents were registered which is 60% of their total number (Table 1).

The presented results convincingly demonstrate the dynamic growth in the number of patents over the past decade, which indicates an increasing interest of inventors in this research problem.

Among the applicants of inventions, the leading position is occupied by Koninklijke Philips NV, Medtronic Inc and Neurescue APS.

The most productive authors of inventions are Steven J. Masters, Salgo Ivan and Frost Habib.

Table 1– Publication dates and patenting dynamics for the period 2017-2026

Years	Number of patents	Years	Number of patents
2017	28	2022	27
2018	22	2023	38
2019	24	2024	35
2020	27	2025	42
2021	30	2026 *	9

* Until March 23, 2026 inclusive.

Table 2 presents the results of the study, reflecting the number of patents issued in countries of the world community and international patent organizations.

Table 2 – Number of patents issued by countries and international patent offices.

Countries and Patent Offices	Number of patents	Countries	Number of patents
USA	180	Russian Federation13	13
PCT	88	Australia11	11
EPO	80	India	9
China	53	Japan	8
Canada	18	Denmark	2

An assessment of inventive activity on the research topic in the countries of the world community showed that the USA occupies the leading position in the total amount of issued patents – 180. The next positions belong to the International patent

offices – PCT and EPO (88 and 80 patents respectively). In other countries, inventive activity was significantly lower.

Summary. The results of the study allow to conclude that scientists from a number of countries around the world have made a significant contribution to the development and patenting of new methods and devices related to the specified problem. The highest inventive activity was noted in the years of the last decade (2017-2026) .

The information presented in this article may be useful to specialists in the field of cardiac anatomy. Patent information is reliable, relevant, has global novelty and is widely used to analyze the inventive activities of scientific organizations and identify trends in the global development of science and technology.

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MYELOPATHY CAUSED BY SPINAL INTRAMEDULLARY SARCOIDOSIS IN A YOUNG MAN: CASE REPORT

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Introduction. Neurosarcoidosis is a manifestation of sarcoidosis in the nervous system. Sarcoidosis is a chronic inflammatory disorder that generally occurs in adults between 20 and 40 years of age and primarily affects the lungs, but can also impact almost every other organ. Neurosarcoidosis occurs in about 14% of cases of systemic sarcoidosis [1, c. 450]. Involvement of the spinal cord in sarcoidosis is less than 1% [5, c. 179]. Patients with intramedullary sarcoidosis present with symptoms and signs