

Association of Cardiovascular Surgeons of Ukraine
National M.M. Amosov Institute of Cardiovascular Surgery National Academy
of Medical Sciences of Ukraine
Shupyk National Healthcare University of Ukraine



UKRAINIAN JOURNAL OF **CARDIO- VASCULAR SURGERY**

УКРАЇНСЬКИЙ ЖУРНАЛ
СЕРЦЕВО-СУДИННОЇ ХІРУРГІЇ

2023, Volume 31, Number 4

Scientific edition

The founders:

National M. M. Amosov Institute of
Cardiovascular Surgery National Acad-
emy of Medical Sciences of Ukraine

Association of Cardiovascular Sur-
geons of Ukraine

Shupyk National Healthcare University
of Ukraine

Publisher Professional Edition Eastern
Europe

Chief editor:

V.V. Lazoryshynets,
Academician of the National Academy
of Medical Sciences of Ukraine,
Corresponding Member
of the National Academy
of Sciences of Ukraine, prof.

Editorial Board:

A. V. Rudenko, deputy chief editor

L. V. Kulyk, deputy chief editor

O. D. Babliak (Kyiv)

J. Bialkowski (Poland)

R. M. Vitovsky (Kyiv)

O. K. Gogayeva (Kyiv)

I. M. Yemets (Kyiv)

A. P. Mazur (Kyiv)

V. B. Maksimenko (Kyiv)

Ye. A. Nastenka (Kyiv)

W. M. Novick (USA)

O. S. Nikonenko (Zaporizhzhia)

I. V. Polivenok (Kharkiv)

V. V. Popov (Kyiv)

K. V. Rudenko (Kyiv)

N. M. Rudenko (Kyiv)

S. A. Rudenko (Kyiv)

S. O. Siromakha (Kyiv)

M. Yu. Sokolov (Kyiv)

I. P. Truba (Kyiv)

P. Ferrazzi (Italy)

A. Weymann (Germany)

Editorial Committee:

Ye. V. Aksenov (Kyiv)

O. A. Beregovyy (Kyiv)

N. M. Verych (Kyiv)

V. K. Gryn (Kyiv)

O. M. Dovgan (Kyiv)

V. A. Zhovnir (Kyiv)

V. P. Zakharova (Kyiv)

Yu. I. Karpenko (Odesa)

A. I. Klantsa (Khmelnitsky)

V. I. Kravchenko (Kyiv)

I. M. Kravchenko (Kyiv)

O. A. Krykunov (Kyiv)

S. V. Maksimenko (Dnipro)

V. G. Mishalov (Kyiv)

Yu. V. Panichkin (Kyiv)

O. V. Rudenko (Kyiv)

R. I. Soskyda (Uzhgorod)

O. S. Stychynskiy (Kyiv)

O. M. Trembovetska (Kyiv)

S. M. Furkalo (Kyiv)

Ukrainian Journal of Cardiovascular Surgery

The registration certificate KB No. 24932-14872ІІР was issued on August 19, 2021 by the Ministry of Justice of Ukraine.

Edited under title "Cardiovascular Surgery Herald" since may 2019 (the registration certificate KB No. 20730-10530 ІІР was given in 08.05.2014 by The State Registration Service of Ukraine).

Edited under title "The Yearbook of Scientific Works of Ukrainian Society of Cardiovascular Surgery" since 2014, certified by the Highest Attestation Commission (approved by the decision of the Presidium of the HAC of Ukraine of April 14, 2010 No. 1-05 / 3 "On adding of periodical scientific professional editions to the new list of scientific professional editions of Ukraine").

Recommended by the Scientific Board of National M. M. Amosov Institute of Cardiovascular Surgery National Academy of Medical Science of Ukraine. Protocol No 18 dated December 06, 2023

The Journal was included to the list of Ukrainian Scientific professional editions in which the results of doctoral thesis for PhD achievement for specialty 222 «Medicine», can be published, category «A». (approved by the order of The Ministry Of Education and Sciences of Ukraine from 10.10.2022 № 894)

The journal is indexed in the scientometric database Scopus

All materials are published by the language of origin (Ukrainian or English).

All submitted articles are undergoing internal and external double-blind peer review.

The journal is free of charge.

Electronic version is presented at www.cvs.org.ua, as well as at the web-site of the Vernadsky National Library in department of «Scientific periodical press of Ukraine».

Prepress preparation of edition: N.G. Gnoyevaya.

On-line: S. V. Rysin.

Address of the editorial office: 6 Amosov Street, Kyiv 03038

e-mail: cvs-herald@ukr.net

Signed for print 28.12.2023.

Offset print. Size 70x100/16. Cond. Print sheets. 19,5

Circulation 150 samples.

Order №

Publisher Professional Edition Eastern Europe

Printer Private Entrepreneur Hrytsenko I. Ya.

18 Prof. Toloka Street, Zaporizhzhia, 69096 Ukraine

© National M.M. Amosov Institute of Cardiovascular Surgery National Academy of Medical Sciences of Ukraine

© Association of Cardiovascular Surgeons of Ukraine

© Shupyk National Healthcare University of Ukraine

© Publisher Professional Edition Eastern Europe

ISSN 2664–5963 (Print)

ISSN 2664–5971 (Online)