



# Проект на тему: Научные статьи в электронных базах данных о факторе риска крови в развитии лихорадки Эбола

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ФАКУЛЬТЕТ: ФАРМАЦИЯ

АЛМАТЫ, 2018

# Проблема

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Мужчина, 38 лет, поступил с жалобами на головную боль, боль в животе и в мышцах. Позднее появилась геморрагическая сыпь, вместе со снижением функции печени и почек. Началось кровотечение из ЖКТ.

В ходе сбора анамнеза выяснилось, что он ездил в рабочую командировку в Нигерию.

При исследовании крови выявили лейкоцитоз, тромбоцитопению.

Врачи диагностировали заражение вирусом Эболы.

Для лечения назначили антитоксические сыворотки, гемостатики.

# По РІСО

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**Р** - мужчина, зараженный вирусом Эболы

**І** – переливание крови

**С** – переливание крови и гемостатики

**О** – улучшение состояния пациента и поддержание его жизнедеятельности

# Вопрос

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Для улучшения состояния больных, зараженных вирусом Эболы, стоит ли назначать переливание крови сразу же, а после назначать гемостатики?

# Главная страница сайта PUBMED

The screenshot shows the PubMed website homepage in a browser window. The browser's address bar displays the URL [www.ncbi.nlm.nih.gov/pubmed/](http://www.ncbi.nlm.nih.gov/pubmed/). The page features a search bar with a dropdown menu set to "PubMed" and a "Search" button. The main content area is divided into several sections:

- PubMed**: A large banner with a background image of books and a tablet. Text: "PubMed comprises more than 28 million citations for biomedical literature from MEDLINE, life science journals, and online books. Citations may include links to full-text content from PubMed Central and publisher web sites."
- Using PubMed**: A list of links including "PubMed Quick Start Guide", "Full Text Articles", "PubMed FAQs", "PubMed Tutorials", and "New and Noteworthy".
- PubMed Tools**: A list of links including "PubMed Mobile", "Single Citation Matcher", "Batch Citation Matcher", "Clinical Queries", and "Topic-Specific Queries".
- More Resources**: A list of links including "MeSH Database", "Journals in NCBI Databases", "Clinical Trials", "E-Utilities (API)", and "LinkOut".
- Latest Literature**: A section titled "New articles from highly accessed journals" listing articles from "Adv Exp Med Biol (1)", "Circulation (1)", "Fertil Steril (6)", and "Immunity (1)".
- Trending Articles**: A section titled "PubMed records with recent increases in activity" listing articles such as "TREM2 Is a Receptor for  $\beta$ -Amyloid that Mediates Microglial Function" and "CRISPR-Cas9 screens in human cells and primary neurons identify modifiers of C9ORF72 dipeptide-repeat-protein toxicity".

The browser's taskbar at the bottom shows the Windows logo, search icon, and several application icons. The system tray on the right indicates the time as 21:42 and the date as 12.03.2018.

# Ключевые слова

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- Ebola and blood
- Эбола и кровь

# Поиск по ключевым словам

Ebola and blood - PubMed: X +

www.ncbi.nlm.nih.gov/pubmed

NCBI Resources How To Sign in to NCBI

PubMed.gov  
 US National Library of Medicine  
 National Institutes of Health

PubMed Ebola and blood Search

Create RSS Create alert Advanced Help

Article types  
 Clinical Trial  
 Review  
 Customize ...

Text availability  
 Abstract  
 Free full text  
 Full text

Publication dates  
 5 years  
 10 years  
 Custom range...

Species  
 Humans  
 Other Animals

Clear all  
 Show additional filters

Format: Summary Sort by: Most Recent Per page: 20 Send to Filters: Manage Filters

Search results  
 Items: 1 to 20 of 834

<< First < Prev Page 1 of 42 Next > Last >>

Sort by:  
 Best match Most recent

Results by year  
 Download CSV

PMC Images search for Ebola and blood

- [Viral Infections in Pregnancy: A Focus on Ebola Virus.](#)  
1. Olgun NS.  
Curr Pharm Des. 2018 Jan 30. doi: 10.2174/1381612824666180130121946. [Epub ahead of print]  
PMID: 29384053  
[Similar articles](#)
- [Adrenomedullin surges are linked to acute episodes of the systemic capillary leak syndrome \(Clarkson disease\).](#)  
2. Xie Z, Chen WS, Yin Y, Chan EC, Terai K, Long LM, Myers TG, Dudek AZ, Druey KM.  
J Leukoc Biol. 2018 Jan 23. doi: 10.1002/JLB.5A0817-324R. [Epub ahead of print]  
PMID: 29360169  
[Similar articles](#)
- [An experience in the clinical use of specific immunoglobulin from horse blood serum for prophylaxis of Ebola haemorrhagic fever.](#)  
3. Borisevich IV, Chemikova NK, Markov VI, Krasnianskiy VP, Borisevich SV, Rozhdestvenskiy EV.  
Vopr Virusol. 2017;62(1):25-9.  
PMID: 29323843  
[Similar articles](#)
- [Establishing Ebola Virus Disease \(EVD\) diagnostics using GeneXpert technology at a mobile laboratory in Liberia: Impact on outbreak response, case management and laboratory systems strengthening.](#)  
4.

Windows 21:59 12.03.2018

# Поиск по ключевым словам

The screenshot shows a web browser window displaying the PubMed search results for the query "Ebola and blood". The browser's address bar shows the URL "www.ncbi.nlm.nih.gov/pubmed". The PubMed logo and navigation links are visible at the top. The search results are displayed in a list format, with filters and sorting options on the left and right sides.

**Search results**  
Items: 16

Filters activated: Clinical Trial, Free full text, published in the last 5 years, Humans. [Clear all](#) to show 834 items.

- [Phase 2 Placebo-Controlled Trial of Two Vaccines to Prevent Ebola in Liberia.](#)  
Kennedy SB, Bolay F, Kieh M, Grandits G, Badio M, Ballou R, Eckes R, Feinberg M, Follmann D, Grund B, Gupta S, Hensley L, Higgs E, Janosko K, Johnson M, Kateh F, Logue J, Marchand J, Monath T, Nason M, Nyenswah T, Roman F, Stavale E, Wolfson J, Neaton JD, Lane HC; PREVAIL I Study Group.  
N Engl J Med. 2017 Oct 12;377(15):1438-1447. doi: 10.1056/NEJMoa1614067.  
PMID: 29020589 **Free Article**  
[Similar articles](#)
- [Safety and immunogenicity of rVSVΔG-ZEBOV-GP Ebola vaccine in adults and children in Lambaréné, Gabon: A phase I randomised trial.](#)  
Agnandji ST, Fernandes JF, Bache EB, Obiang Mba RM, Brosnahan JS, Kabwende L, Pitzinger P, Staarink P, Massinga-Loembe M, Krähling V, Biedenkopf N, Fehling SK, Strecker T, Clark DJ, Staines HM, Hooper JW, Silvera P, Moorthy V, Kiemy MP, Adegnikaa AA, Grobusch MP, Becker S, Ramharter M, Mordmüller B, Lell B; VEBCON Consortium, Krishna S, Kremsner PG.  
PLoS Med. 2017 Oct 6;14(10):e1002402. doi: 10.1371/journal.pmed.1002402. eCollection 2017 Oct.  
PMID: 28985239 **Free PMC Article**  
[Similar articles](#)
- [Assessing the safety and immunogenicity of recombinant vesicular stomatitis virus Ebola vaccine in healthy adults: a randomized clinical trial](#)

**Titles with your search terms**  
An experience in the clinical use of specific immunoglobulin from horse b [Vopr Virusol. 2017]  
Field-deployable, quantitative, rapid identification of active Ebola virus infection in [Chem Sci. 2017]  
Comparison of Transcriptomic Platforms for Analysis of Whole Blood from Eb [Sci Rep. 2017]  
[See more...](#)

**Find related data**  
Database:   
[Find items](#)

**Search details**  
((("hemorrhagic fever, ebola"[MeSH Terms] OR ("hemorrhagic"[All Fields] AND "fever"[All Fields] AND "ebola"[All Fields]) OR "ebola hemorrhagic

# Поиск по ключевым словам

9. **Blood kinetics of Ebola virus in survivors and nonsurvivors.**  
Lanini S, Portella G, Vairo F, Kobinger GP, Pesenti A, Langer M, Kabia S, Brogiato G, Amone J, Castilletti C, Miccio R, Zumla A, Capobianchi MR, Di Caro A, Strada G, Ippolito G; INMI-EMERGENCY EBOV Sierra Leone Study Group.  
J Clin Invest. 2015 Dec;125(12):4692-8. doi: 10.1172/JCI83111. Epub 2015 Nov 9.  
PMID: 26735992 Free Article  
[Similar articles](#)

10. **The Use of Ebola Convalescent Plasma to Treat Ebola Virus Disease in Resource-Constrained Settings: A Perspective From the Field.**  
van Griensven J, De Weigheleire A, Delamou A, Smith PG, Edwards T, Vandekerckhove P, Bah EI, Colebunders R, Herve I, Lazaygues C, Haba N, Lynen L.  
Clin Infect Dis. 2016 Jan 1;62(1):69-74. doi: 10.1093/cid/civ680. Epub 2015 Aug 10.  
PMID: 26261205 Free PMC Article  
[Similar articles](#)

11. **Phase 1 Trials of rVSV Ebola Vaccine in Africa and Europe.**  
Agnandji ST, Huttner A, Zinser ME, Njuguna P, Dahlke C, Fernandes JF, Yerly S, Dayer JA, Kraehling V, Kasonta R, Adegnikaa AA, Altfeld M, Auderset F, Bache EB, Biedenkopf N, Borregaard S, Brosnahan JS, Burrow R, Combescure C, Desmeules J, Eickmann M, Fehling SK, Finckh A, Goncalves AR, Grobusch MP, Hooper J, Jambrecina A, Kabwende AL, Kaya G, Kimani D, Lell B, Lemaître B, Lohse AW, Massinga-Loembe M, Matthey A, Mordmüller B, Nolting A, Ogwang C, Ramharter M, Schmidt-Chanasit J, Schmiedel S, Silvera P, Stahl FR, Staines HM, Strecker T, Stubbe HC, Tsofa B, Zaki S, Fast P, Moorthy V, Kaiser L, Krishna S, Becker S, Kieny MP, Bejon P, Kreamsner PG, Addo MM, Siegrist CA.  
N Engl J Med. 2016 Apr 28;374(17):1647-60. doi: 10.1056/NEJMoa1502924. Epub 2015 Apr 1.  
PMID: 25830326 Free PMC Article  
[Similar articles](#)

12. **A Recombinant Vesicular Stomatitis Virus Ebola Vaccine.**  
Regules JA, Beigel JH, Paolino KM, Voell J, Castellano AR, Hu Z, Muñoz P, Moon JE, Ruck RC, Bennett JW, Twomey PS, Gutiérrez RL, Remich SA, Hack HR, Wisniewski ML, Joselyn MD, Kwilas

# Переход по ссылке к тексту статьи

The screenshot shows a web browser window with the address bar displaying `www.ncbi.nlm.nih.gov/pubmed/26551684`. The page is the PubMed entry for the article "Blood kinetics of Ebola virus in survivors and nonsurvivors".

**Page Header:** NCBI Resources How To Sign in to NCBI  
PubMed.gov US National Library of Medicine National Institutes of Health  
Advanced Search Help

**Article Information:**  
Format: Abstract  
J Clin Invest. 2015 Dec;125(12):4692-8. doi: 10.1172/JCI83111. Epub 2015 Nov 9.

**Title:** Blood kinetics of Ebola virus in survivors and nonsurvivors.

**Authors:** Lanini S, Portella G, Vairo F, Kobinger GP, Pesenti A, Langer M, Kabia S, Brogiato G, Amone J, Castilletti C, Miccio R, Zumla A, Capobianchi MR, Di Caro A, Strada G, Jppolito G; INMI-EMERGENCY EBOV Sierra Leone Study Group.

**Collaborators:** (31)

**Abstract:**  
**BACKGROUND:** Infection with Ebola virus (EBOV) results in a life-threatening disease, with reported mortality rates between 50%-70%. The factors that determine patient survival are poorly understood; however, clinical observations indicate that EBOV viremia may be associated with fatal outcome. We conducted a study of the kinetics of Zaire EBOV viremia in patients with EBOV disease (EVD) who were managed at an Ebola Treatment Centre in Sierra Leone during the recent West African outbreak.  
**METHODS:** Data from 84 EVD patients (38 survivors, 46 nonsurvivors) were analyzed, and EBOV viremia was quantified between 2 and 13 days after symptom onset. Time since symptom onset and clinical outcome were used as independent variables to compare EBOV viral kinetics in survivors and nonsurvivors.  
**RESULTS:** In all patients, EBOV viremia kinetics was a quadratic function of time; however, EBOV viremia was 0.94 logarithm (log) copies per ml (cp/ml) ( $P = 0.011$ ) higher in nonsurvivors than in survivors from day 2 after the onset of symptoms. Survivors reached peak viremia levels at an earlier time after symptom onset than nonsurvivors (day 5 versus day 7) and had lower mean peak viremia levels compared with nonsurvivors (7.46 log cp/ml; 95% CI, 7.17-7.76 vs. 8.60 log cp/ml; 95% CI, 8.27-8.93). Before reaching peak values, EBOV viremia similarly increased both in survivors and nonsurvivors; however, the decay of viremia after the peak was much stronger in survivors than in nonsurvivors.  
**CONCLUSION:** Our results demonstrate that plasma concentrations of EBOV are markedly different between survivors and nonsurvivors at very early time points after symptom onset and may be predictive of outcome. Further studies focused on the early phase of the disease will be required to identify the causal and prognostic factors that determine patient outcome.  
**FUNDING:** Italian Ministry of Health; Italian Ministry of Foreign Affairs; EMERGENCY's private donations; and Royal Engineers for DFID-UK.

**Full text links:** VIEW ARTICLE FULL TEXT PMC Full text

**Save items:** Add to Favorites

**Similar articles:**  
Ebola viral load at diagnosis associates with patient outcome and outbreak [J Clin Invest. 2015]  
Clinical presentations and outcomes of patients with Ebola virus disease [Infect Dis Poverty. 2016]  
Characteristics and Clinical Management of a Cluster of 3 Patients With [Ann Intern Med. 2015]  
**Review** Towards detection and diagnosis of Ebola virus disease a [Biosens Bioelectron. 2016]  
**Review** Ebola virus persistence as a new focus in clinical research. [Curr Opin Virol. 2017]

**Cited by 16 PubMed Central articles**

**Taskbar:** Windows taskbar with search, task view, and application icons (Edge, Chrome, Firefox, File Explorer, PowerPoint). System tray shows network, volume, and date/time (22:04 12.03.2018).

# Это один из видов обсервационного исследования – исследование случай-контроль, так как:

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Исследование было проведено в центре лечения пациентов, зараженных вирусом Эболы в Сьерра-Леоне.

Производился анализ данных 84 пациентов (38 из которых остались в живых, 46-не выживших).

Обе группы относятся к одной и той же популяции риска.

Воздействие измерялось одинаково в обеих группах, то есть между 2 и 13 днями после появления симптомов.

**Место проведения исследования:** центр лечения пациентов, зараженных вирусом Эболы в Сьерра-Леоне.

**Авторы:** Lanini S, Portella G, Vairo F, Kobinger GP, Pesenti A, Langer M, Kabia S, Brogiato G, Amone J, Castilletti C, Miccio R, Zumla A, Capobianchi MR, Di Caro A, Strada G, Ippolito G; INMI-EMERGENCY EBOV Sierra Leone Study Group.

**Дата публикации:** 2015 Dec

## **METHODS:**

Data from 84 EVD patients (38 survivors, 46 nonsurvivors) were analyzed, and EBOV viremia was quantified between 2 and 13 days after symptom onset. Time since symptom onset and clinical outcome were used as independent variables to compare EBOV viral kinetics in survivors and nonsurvivors.

## **МЕТОДЫ:**

Были проанализированы данные 84 пациентов с БВВЭ (38 человек, оставшихся в живых, 46 не выживших), а показатель виремии был определен между 2 и 13 днями после появления первых симптомов. Время, прошедшее с момента появления симптомов и клинического исхода, использовалось в качестве независимых переменных для сравнения вирусной кинетики БВВЭ у выживших и не выживших.

## RESULTS:

In all patients, EBOV viremia kinetics was a quadratic function of time; however, EBOV viremia was 0.94 logarithm (log) copies per ml (cp/ml) ( $P = 0.011$ ) higher in nonsurvivors than in survivors from day 2 after the onset of symptoms. Survivors reached peak viremia levels at an earlier time after symptom onset than nonsurvivors (day 5 versus day 7) and had lower mean peak viremia levels compared with nonsurvivors (7.46 log cp/ml; 95% CI, 7.17-7.76 vs. 8.60 log cp/ml; 95% CI, 8.27-8.93). Before reaching peak values, EBOV viremia similarly increased both in survivors and nonsurvivors; however, the decay of viremia after the peak was much stronger in survivors than in nonsurvivors.

## РЕЗУЛЬТАТЫ:

У всех пациентов кинетика виремии представлена квадратичной функцией времени; Тем не менее, виремия составляла 0,94 (log) на мл (cp / ml) ( $P = 0,011$ ) выше у не выживших, чем у выживших со 2-го дня после появления симптомов. Оставшиеся в живых достигли пиковых уровней виремии в более раннем периоде после появления симптомов, чем погибшие (5-й день против 7-го дня) и имели более низкий средний уровень виремии по сравнению с не выжившими (7,46 log cp / ml, 95% ДИ, 7,17-7,76 против 8,60 log cp / мл, 95% ДИ, 8,27-8,93). До достижения пиковых значений EBV виремия одинаково увеличивалась как у выживших, так и у умерших; однако распад виремии после пика был намного сильнее у выживших, чем у остальных погибших.

## CONCLUSION:

Our results demonstrate that plasma concentrations of EBOV are markedly different between survivors and nonsurvivors at very early time points after symptom onset and may be predicative of outcome. Further studies focused on the early phase of the disease will be required to identify the causal and prognostic factors that determine patient outcome.

## ВЫВОД:

Наши результаты показывают, что концентрация вируса в плазме крови заметно отличаются между выжившими и не выжившими в очень ранние моменты времени после появления симптомов и могут быть предикативными для исхода.

Дальнейшие исследования, посвященные ранней фазе заболевания, проводятся для определения причинно-следственных факторов, определяющих клинический исход для пациентов.

# Мое мнение

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Для поддержания жизнедеятельности пациентов, зараженных вирусом Эболы, я думаю, следует все-таки назначать сразу же переливание крови, так как после контакта с зараженными наблюдается виремия. А дальше следует использовать в лечении гемостатики.

Вообще эффективным способом сокращения передачи болезни среди людей является повышение информированности о факторах риска заражения БВВЭ и мерах индивидуальной защиты (включая вакцинацию).

Спасибо за внимание!