

Резюме: Водовозова Елена Львовна



Адрес

Федеральное государственное
бюджетное учреждение науки
Институт биорганической химии им.
академиков М.М. Шемякина и Ю.А.
Овчинникова Российской академии
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Контакты

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Образование

1970– 2007	Россия, Москва	Институт биорганической химии им. академиков М.М. Шемякина и Ю.А. Овчинникова РАН (ИБХ)	Диплом доктора химических наук
1981– 1985	Россия, Москва	Институт биорганической химии имени М.М. Шемякина АН СССР (ИБХ)	Диплом кандидата химических наук по специальности «биохимия»
1976– 1981	Россия, Москва	Московский государственный университет имени М.В. Ломоносова (МГУ), химический факультет	Диплом химика

Работа в ИБХ

Заведующий лабораторией

Членство в советах и комиссиях ИБХ

Ученый совет

Научные интересы

Более 20 лет одним из главных направлений работы Е. Л. Водовозовой являются исследования в области создания систем направленной доставки лекарств на основе липосом, липидных производных противоопухолевых химиотерапевтических средств (липофильных пролекарств) и липофильных гликоконъюгатов (молекулярных адресов). Другое направление исследований, которое развивает Е. Л. Водовозова — это разработка фотоаффинных зондов с новым высокоэффективным фотофором (диазоциклопентадиен-2-илкарбонильной меткой).

Степени и звания

Доктор наук (Химические науки, 03.00.04 — Биохимия)

Гранты и проекты

2020– наст.вр.	Разработка прототипа вакцинной конструкции для лечения и профилактики новой коронавирусной инфекции COVID-19 на основе липосом с набором Т-клеточных эпитопов
2019– наст.вр.	Взаимодействия противоопухолевых липосом, несущих в бислое липофильные пролекарства, с эндотелиальными клетками и белками плазмы в динамических условиях: биомоделирование в микроканале микрофлюидного устройства

Публикации

1. Onishchenko N, Tretiakova D, **Vodovozova E** (2021). Spotlight on the Protein Corona of Liposomes. *Acta*

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2. Alekseeva AS, Volynsky PE, Krylov NA, Chernikov VP, **Vodovozova EL**, Boldyrev IA (2021). Phospholipase A2 way to hydrolysis: Dint formation, hydrophobic mismatch, and lipid exclusion. *BIOCHIM BIOPHYS ACTA* 1863 (1), 183481, [10.1016/j.bbamem.2020.183481](https://doi.org/10.1016/j.bbamem.2020.183481)
 3. Tretiakova D, Le-Deigen I, Onishchenko N, Kuntsche J, Kudryashova E, **Vodovozova E** (2021). Phosphatidylinositol stabilizes fluid-phase liposomes loaded with a melphalan lipophilic prodrug. *Pharmaceutics* 13 (4) , [10.3390/pharmaceutics13040473](https://doi.org/10.3390/pharmaceutics13040473)
 4. Tretiakova DS, Khaidukov SV, Babayants AA, Frolova IS, Shcheglovitova ON, Onishchenko NR, **Vodovozova EL** (2020). Lipophilic Prodrug of Methotrexate in the Membrane of Liposomes Promotes Their Uptake by Human Blood Phagocytes. *Acta Naturae* 12 (1), 99–109, [10.32607/actanaturae.10946](https://doi.org/10.32607/actanaturae.10946)
 5. Tretiakova D, Svirshchevskaya E, Onishchenko N, Alekseeva A, Boldyrev I, Kamyshinsky R, Natykan A, Lokhmotov A, Arantseva D, Shobolov D, **Vodovozova E** (2020). Liposomal Formulation of a Melphalan Lipophilic Prodrug: Studies of Acute Toxicity, Tolerability, and Antitumor Efficacy. *Curr Drug Deliv* 17 (4), 312–323, [10.2174/1567201817666200214105357](https://doi.org/10.2174/1567201817666200214105357)
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 7. Tretiakova DS, Alekseeva AS, Galimzyanov TR, Boldyrev AM, Chernyadyev AY, Ermakov YA, Batishchev OV, **Vodovozova EL**, Boldyrev IA (2018). Lateral stress profile and fluorescent lipid probes. FRET pair of probes that introduces minimal distortions into lipid packing. *BIOCHIM BIOPHYS ACTA* 1860 (11), 2337–2347, [10.1016/j.bbamem.2018.05.020](https://doi.org/10.1016/j.bbamem.2018.05.020)
 8. Arantseva DA, **Vodovozova EL** (2018). Platinum-Based Antitumor Drugs and Their Liposomal Formulations in Clinical Trials. *Russ. J. Bioorganic Chem.* 44 (6), 619–630, [10.1134/S1068162018060031](https://doi.org/10.1134/S1068162018060031)
 9. Alekseeva AS, Chugunov AO, Volynsky PE, Onishchenko NR, Molotkovsky JG, Efremov RG, Boldyrev IA, **Vodovozova EL** (2018). Behavior of Doxorubicin Lipophilic Conjugates in Liposomal Lipid Bilayers. *Russ. J. Bioorganic Chem.* 44 (6), 732–739, [10.1134/S1068162019010023](https://doi.org/10.1134/S1068162019010023)
 10. Zhang C, Feng WEI, **Vodovozova E**, Tretiakova D, Boldyrev I, Li Y, Kürths J, Yu T, Semyachkina-Glushkovskaya O, Zhu DAN (2018). Photodynamic opening of the blood-brain barrier to high weight molecules and liposomes through an optical clearing skull window. *Biomed Opt Express* 9 (10), 4850, [10.1364/BOE.9.004850](https://doi.org/10.1364/BOE.9.004850)
 11. Tretiakova D, Onishchenko N, Boldyrev I, Mikhalyov I, Tuzikov A, Bovin N, Evtushenko E, **Vodovozova E** (2018). Influence of stabilizing components on the integrity of antitumor liposomes loaded with lipophilic prodrug in the bilayer. *Colloids Surf B Biointerfaces* 166, 45–53, [10.1016/j.colsurfb.2018.02.061](https://doi.org/10.1016/j.colsurfb.2018.02.061)
 12. Tretiakova DS, Onishchenko NR, Vostrova AG, **Vodovozova EL** (2017). Interactions of liposomes carrying lipophilic prodrugs in the bilayer with blood plasma proteins. *Russ. J. Bioorganic Chem.* 43 (6), 678–689, [10.1134/S1068162017060139](https://doi.org/10.1134/S1068162017060139)
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