

DICERNA PHARMACEUTICALS, INC. ('Dicerna')

PRIVACY NOTICE.

Dicerna Pharmaceuticals, Inc. ("Dicerna") knows that you care how information about you is used and shared, and we appreciate your trust that we will respect your privacy, and do so carefully and sensibly. This notice describes our privacy policy for the "www.Dicerna.com" web site (the "Site").

Dicerna is committed to protecting your Personal Data. This Privacy Notice will inform you as to how we **will use and protect** Personal Data of citizens' resident within the EU, tell you about your privacy rights and how the law protects you.

Under the EU's General Data Protection Regulation (GDPR) 'Personal Data' is defined as:

"any information relating to an identified or identifiable natural person ('data subject'); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person".

Our primary purpose in collecting personal information is to provide you with an efficient and secure way to obtain information about Dicerna, such as to respond to your inquiry, send you news alerts or to consider your qualifications for a position at Dicerna. We collect only personal information about you that we consider necessary for achieving this purpose. In general, you can browse the Site without telling us who you are or revealing any personal information about yourself. We may track certain information based upon your behavior on the Site. We use this information to analyze how our Site is used.

Like many Web sites, from time to time, we automatically gather certain information about our Site traffic and store it in log files. This information includes Internet protocol (IP) addresses, browser type, Internet service provider (ISP), referring/exit pages, operating system, date/time stamp, and clickstream data. We use this information, which does not identify individual users, to analyze trends, to administer the Site, to track users' movements around the Site and to gather demographic information about our user base. We do not link this automatically collected data to personally identifiable information.

Periodically, some pages on this web site may use "cookies," which are small files that the site places on your hard drive for identification purposes. These files are used for Site registration and customization the next time you visit us. You should note that cookies cannot read data off of your hard drive. Your web browser may allow you to be notified when you are receiving a cookie, giving you the choice to accept it or not. You can also refuse all cookies by turning them off in your browser. By not accepting cookies, some pages may not fully function and you may not be able to access certain information on this website. Please go to our "cookies" policy for further details here: (pointer to suggested Cookies policy)

1.0 Purpose of this Privacy Notice

- 1.1 This Privacy Notice aims to give you information on how Dicerna collects, processes and stores Personal Data of citizens' resident within the European Union (EU).
- 1.2 It is important that you read this Privacy Notice so that you are fully aware of how and why we are using your data.

2.0 Contact details

- 2.1 Our full details are:

Full name and address of legal entity

Dicerna Pharmaceuticals, Inc.
87 Cambridgepark Drive

Cambridge, MA 02140 USA

Name of Data Protection Officer (DPO)

Dr. Phil Griffiths LLM

DPO email address

sar@thedpo.co.uk

DPO postal Address

The DPO Ltd, Capital Tower, Cardiff, UK.
CF10 3AZ

3.0 Changes to the Privacy Notice and your duty to inform us of changes

Notice of all changes that materially affect ways in which your personally identifiable data may be used or shared will be posted in updates to our Privacy Policy. If you continue to use our (description of what you are using the data for) after notice of changes have been sent to you or published on our site, you hereby provide your consent to the changed practices.

If we decide to change our privacy policy, we will post changes to this privacy policy and other places we deem appropriate so that you are aware of what information we collect, how we use it, and under what circumstances, if any, we disclose it.

We reserve the right to modify this privacy policy at any time, so please review it frequently. If we make changes that materially affect our uses or disclosures of personally identifiable information that we have previously collected, we will announce the changes on our Site or, if appropriate, by email.

It is important that the Personal Data we hold about you is accurate and current. Please keep us informed if your Personal Data changes during your relationship with us.

4.0 The data we collect about you

4.1 We may collect, use, store and transfer different categories of Personal Data about you which we have grouped together as follows:

- **Identity Data** includes first name, maiden name, last name, username or similar identifier, marital status, title, date of birth and gender.
- **Contact Data** includes billing address, delivery address, email address and telephone numbers.
- **Financial Data** includes bank account, payment card details, and payroll data.
- **Transaction Data** includes details about payments to and from you and other details of products and services you have purchased from us.
- **Technical Data** includes internet protocol (IP) address, your login data, browser type and version, time zone setting and location, browser plug-in types and versions, operating system and platform and other technology on the devices you use to access our website or intranet.
- **Profile Data** includes your username and password on our website, our intranet, purchases or orders made by you, your preferences, and feedback and survey responses.
- **Usage Data** includes information about how you use our website, intranet, products and services.
- **Marketing and Communications Data** includes your preferences in receiving marketing from us and our third parties and your communication preferences.
- **Special Categories of Personal Data:** these are details about your race or ethnicity, religious or philosophical beliefs, sex life, sexual orientation, political opinions, trade

union membership, information about your health and genetic and biometric data. We undertake studies within the EU and we will use information from subjects' medical records and other health data in order to improve healthcare. As a pharmaceutical organisation we have a legitimate interest in using information relating to your health for research studies, when you agree to take part in a research study. This means that we will use your data when we act as the data controller for such studies, collected in the course of a research study, in the ways needed to conduct and analyse the research study. Your rights to access, change or move your information are limited, as we need to manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained. To safeguard your rights, we will use the minimum personally-identifiable information possible.

5.0 If you fail to provide Personal Data

Where we need to collect Personal Data by law, or under the terms of a contract we have with you and you fail to provide that data when requested, we may not be able to perform the contract we have or are trying to enter into with you (for example, to provide you with goods or services or employee benefits). In this case, we may have to cancel a product or service you have with us but we will notify you promptly if this is the case at the time.

6.0 We use different methods to collect data from and about you including through:

6.1 Direct interactions. You may give us your Identity, Contact and Financial Data by filling in forms or by corresponding with us by post, phone, and e-mail or otherwise. This includes Personal Data you provide when you:

- apply for our products or services;
- create an account on our website;
- subscribe to our service or publications;
- request marketing to be sent to you;
- enter a promotion or survey;
- give us some feedback;
- provide unsolicited information to us;
- apply for employment with us or when you become an employee.
- agree to take part in a clinical research programme

6.2 Automated interactions. As you interact with our website or intranet, we may automatically collect Technical Data about your equipment, browsing actions and patterns. We collect this Personal Data by using cookies, and other similar technologies.

6.3 Third parties (or publicly available sources). We may receive categories of Personal Data about you from various third parties and public sources as set out below:

- Technical Data from analytics providers such as Google; advertising networks and search information providers.
- Contact, Financial and Transaction Data from providers of technical, payment and delivery services.
- Identity and Contact Data from data brokers, aggregators or recruitment agencies.
- Identity and Contact Data from publicly available sources such as Companies House and the Electoral Register.

- Special Categories of Data including Health Data from Clinical Research Organisations conducting clinical research on our behalf.

7.0 How we use your Personal Data

7.1 We will only use your Personal Data when the law allows us to. Most commonly, we will use your Personal Data in the following circumstances:

- Where we need to perform the contract we are about to enter into or have entered into with you.
- Where it is necessary for our legitimate interests (or those of a third party) and your interests and fundamental rights do not override those interests.
- Where we need to comply with a legal or regulatory obligation.

7.2 We may also use your Personal Data in the following situations, which are likely to be rare:

- Where we need to protect your interests (or someone else's interests).
- Where it is needed in the public interest or for official purposes.

7.3 Generally we do not rely on consent as a legal basis for processing your Personal Data other than in relation to sending direct marketing communications to you via email or text message. You have the right to withdraw consent to marketing at any time by contacting us.

8.0 Purposes for which we will use your Personal Data

8.1 We have set out below, in a table format, a description of all the ways we plan to use your Personal Data, and which of the legal bases we rely on to do so. We have also identified what our legitimate interests are where appropriate.

8.2 Note that we may process your Personal Data for more than one lawful ground depending on the specific purpose for which we are using your data. Please contact us if you need additional details about the specific legal ground we are relying on to process your Personal Data where more than one ground has been set out in the table below.

Purpose/Activity	Category of Personal Data	Lawful basis for processing including basis of legitimate interest
To register you as a new client or employee.	(a) Identity (b) Contact	Performance of a contract with you
To process and deliver your service or order including: (a) Manage payments, fees and charges (b) Collect and recover money owed to us	(a) Identity (b) Contact (c) Financial (d) Transaction (e) Marketing and Communications	(a) Performance of a contract with you (b) Necessary for our legitimate interests <ul style="list-style-type: none"> • to recover debts due to us.
To manage our relationship with	(a) Identity	(a) Performance of a contract with you

<p>you which will include:</p> <p>(a) Notifying you about changes to our terms or privacy policy</p> <p>(b) Asking you to leave a review or take a survey</p> <p>(c) As an employee</p>	<p>(b) Contact</p> <p>(c) Profile</p> <p>(d) Usage</p> <p>(e) Marketing and Communications</p> <p>(f) Financial</p>	<p>(b) Necessary to comply with a legal obligation</p> <p>(c) Necessary for our legitimate interests</p> <ul style="list-style-type: none"> • to keep our records updated; • to study how customers and clients use our products/services; and, • to administer our employee relationships.
<p>To enable you to partake in a prize draw, competition or complete a survey</p>	<p>(a) Identity</p> <p>(b) Contact</p> <p>(c) Profile</p> <p>(d) Usage</p> <p>(e) Marketing and Communications</p>	<p>(a) Performance of a contract with you</p> <p>(b) Necessary for our legitimate interests</p> <ul style="list-style-type: none"> • to study how customers use our products/services; and • to develop them and grow our business.
<p>To administer and protect our business and our intranet and website (including troubleshooting, data analysis, testing, system maintenance, support, reporting and hosting of data)</p>	<p>(a) Identity</p> <p>(b) Contact</p> <p>(c) Profile</p> <p>(d) Technical</p> <p>(e) Usage</p>	<p>(a) Necessary for our legitimate interests</p> <ul style="list-style-type: none"> • for running our business and employee relationship, • provision of administration and IT services, network security, • to prevent fraud and • in the context of a business reorganisation or group restructuring exercise. <p>(b) Necessary to comply with a legal obligation</p>
<p>To deliver relevant website content and advertisements to you and measure or understand the effectiveness of the advertising we serve to you</p>	<p>(a) Identity</p> <p>(b) Contact</p> <p>(c) Profile</p> <p>(d) Usage</p> <p>(e) Marketing and Communications</p> <p>(f) Technical</p>	<p>Necessary for our legitimate interests</p> <ul style="list-style-type: none"> • to study how customers use our products/services, • to develop them, • to grow our business and • to inform our marketing strategy.
<p>To use data analytics to improve our website, products/services, marketing, customer relationships and experiences</p>	<p>(a) Technical</p> <p>(b) Usage</p>	<p>Necessary for our legitimate interests</p> <ul style="list-style-type: none"> • to define types of customers for our products and services; • to keep our website updated and relevant;

		<ul style="list-style-type: none"> to develop our business; and, to inform our marketing strategy.
To make suggestions and recommendations to you about goods or services that may be of interest to you	(a) Identity (b) Contact (c) Technical (d) Usage (e) Profile	Necessary for our legitimate interests <ul style="list-style-type: none"> to develop our products/services; and, to grow our business.
To conduct a research programme	(a) Identity (b) Contact (c) Financial (d) Special Categories (Health Data)	Necessary for our legitimate interests <ul style="list-style-type: none"> to improve healthcare; and to conduct and analyse the research study.

9.0 Marketing

9.1 We strive to provide you with choices regarding certain Personal Data uses, particularly around marketing and advertising. We have established the following Personal Data control mechanisms:

- Promotional material from us. We may use your Identity, Contact, Technical, Usage and Profile Data to form a view on what we think you may want or need, or what may be of interest to you. This is how we decide which products, services and offers may be relevant for you (we call this marketing).
- You will receive marketing communications from us if you have requested information from us or purchased products or services from us and, in each case, you have opted-in to receiving that marketing.
- Third-party marketing. We will get your express opt-in consent before we share your Personal Data with any company outside Dicerna for marketing purposes.
- Opting out. You can ask us or third parties to stop sending you marketing messages at any time by following the opt-out links on any marketing message sent to you.
- Where you opt-out of receiving these marketing messages, this will not apply to Personal Data provided to us as a result of a product/service purchase, warranty, product/service experience or other transactions.
- Cookies. Most web browsers allow some control of most cookies through the browser settings. To find out more about cookies, including how to see what cookies have been set and how to manage and delete them, visit www.aboutcookies.org or www.allaboutcookies.org.
- To opt out of being tracked by Google Analytics across all websites visit <http://tools.google.com/dlpage/gaoptout>.

10.0 Change of purpose

- 10.1 We will only use your Personal Data for the purposes for which we collected it, unless we reasonably consider that we need to use it for another reason and that reason is compatible with the original purpose.
- 10.2 If we need to use your Personal Data for an unrelated purpose, we will notify you and we will explain the legal basis which allows us to do so.
- 10.3 Please note that we may process your Personal Data without your knowledge or consent, in compliance with the above rules, where this is required or permitted by law.

11.0 Disclosures of your Personal Data

- 11.1 We may have to share your Personal Data with the parties set out below for the purposes set out in the table above.
 - **Internal Third Parties:** other companies or departments in Dicerna acting as processors or joint controllers and provide IT and system administration services and undertake leadership reporting
 - **External Third Parties:** service providers acting as processors based who provide IT and system administration services
 - **Other Third Parties** to whom we may choose to sell, transfer, or merge parts of our business or our assets. Alternatively, we may seek to acquire other businesses or merge with them. If a change happens to our business, then the new owners may use your Personal Data in the same way as set out in this Privacy Notice.
 - **Professional advisers:** acting as processors or joint controllers including lawyers, bankers, auditors and insurers who provide consultancy, banking, legal, insurance and accounting and payroll services.
 - **HM Revenue & Customs,** regulators and other authorities acting as processors or joint controllers who require reporting of processing activities in certain circumstances.
- 11.2 We require all third parties to respect the security of your Personal Data and to treat it in accordance with the law. We do not allow our third-party service providers to use your Personal Data for their own purposes and only permit them to process your Personal Data for specified purposes and in accordance with our instructions.

12.0 International transfers

- 12.1 We are based outside the European Economic Area (EEA), however our DPO, based in the EU, is our designated representative within the EU. The processing of your Personal Data may involve a transfer of data outside the EEA.
- 12.2 Whenever we transfer your Personal Data out of the EEA, we ensure a similar degree of protection is afforded to it by ensuring at least one of the following safeguards is implemented:
 - We will only transfer your Personal Data to countries that have been deemed to provide an adequate level of protection for Personal Data by the European Commission.
 - Where we use certain service providers, we may use specific contracts approved by the European Commission which give Personal Data the same protection it has in Europe.
 - Regarding transfers to the US, we are part of the Privacy Shield which requires us to provide similar protection to Personal Data shared between the Europe and the US.

13.0 Data security

- 13.1 We have put in place appropriate security measures to prevent your Personal Data from being accidentally lost, used or accessed in an unauthorised way, altered or disclosed. In addition, we limit access to your Personal Data to those employees, agents, contractors and other third

parties who have a business need to know. They will only process your Personal Data on our instructions and they are subject to the same duty of confidentiality as we are with respect to your Personal Data.

- 13.2 We have put in place procedures to deal with any suspected Personal Data breach and will notify you and any applicable regulator of a breach where we are legally required to do so.

14.0 Data retention

- 14.1 We will only retain your Personal Data for as long as necessary to fulfil the purposes we collected it for, including for the purposes of satisfying any legal, accounting, or reporting requirements.
- 14.2 To determine the appropriate retention period for Personal Data, we consider the amount, nature, and sensitivity of the Personal Data, the potential risk of harm from unauthorised use or disclosure of your Personal Data, the purposes for which we process your Personal Data and whether we can achieve those purposes through other means, and the applicable legal requirements.
- 14.3 In some circumstances we may anonymise your Personal Data (so that it can no longer be associated with you) for research or statistical purposes in which case we may use this information indefinitely without further notice to you.

15.0 Your legal rights

- 15.1 Under certain circumstances, you have rights under data protection laws in relation to your Personal Data to request the following:
- access to your Personal Data.
 - correction of your Personal Data.
 - erasure of your Personal Data.
 - object to processing of your Personal Data.
 - restrict of processing your Personal Data.
 - transfer of your Personal Data.
 - withdraw consent to any consent that you have previously given.
- 15.2 If you wish to exercise any of the rights set out above, please contact our DPO. You can also contact the Information Commissioner's Office via <https://ico.org.uk/> for information, advice or to make a complaint.
- 15.3 You will not have to pay a fee to access your Personal Data (or to exercise any of the other rights). However, we may charge a reasonable fee if your request is clearly unfounded, repetitive or excessive. Alternatively, we may refuse to comply with your request in these circumstances.

16.0 What we may need from you

We may need to request specific information from you to help us confirm your identity and ensure your right to access your Personal Data (or to exercise any of your other rights). This is a security measure to ensure that Personal Data is not disclosed to any person who has no right to receive it. We may also contact you to ask you for further information in relation to your request to speed up our response.

17.0 Time limit to respond

We try to respond to all legitimate requests within one month. Occasionally it may take us longer than a month if your request is particularly complex or you have made a number of requests. In this case, we will notify you and keep you updated.

v1.0

May 25th 2018