



Algocyte[®] Platform

Instructions for Use

IFU-006-014 V2



Oxford Immune Algorithmics Ltd, Unit 6 -
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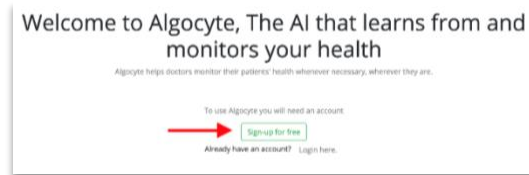


Algocyte® - Quick guide

3 simple steps to get you started

Step 1 – Registration and logging in

Visit <https://uk.algocyte.com> (U.K.) or <https://eu.algocyte.com> (E.U.), to sign up, create and verify your account*.



*Refer to Step 5 of the "User Sign-up and Registration" section in the user manual to learn more about how to request your provider account access.

Step 2 – Getting Started

Once logged in, confirm you have read the T&C's before closing and proceed to complete your account

Click on '**Profile**' and ensure all your '**Demographic information**' is filled out completely

algocyte DASHBOARD EVENTS KIT MANAGEMENT **PROFILE**

Patient Name: Hafsa Saunders Patient DOB: 28-02-2014 Patient ID : 4447103845 Current Date : 09-05-2022 [Complete Profile](#)

1 Demographic Information

MRN Number: 4447103845 First Name: Hafsa

Enter Your surname: Saunders Country:
Post Code: RG1 5AN Post Town: Reading

Facility Name: Royal Berkshire NHS Foundation Trust, London Road

*Providers will be taken to the 'My Subscribers' window, where you will need to select a pre-linked patient.

Now it is time to order your first home kit

Click on '**Kit Management**', you will be presented with two options: **Register Kit, Order kit**

algocyte DASHBOARD EVENTS **KIT MANAGEMENT** PROFILE

Register Kit
Order Kit

Patient Name: Hafsa Saunders Patient ID : 4447103845 Current Date : 09-05-

Click on '**Order Kit**' and fill out the following

Order Kit

To schedule a test kit dispatch, you will need to choose:

1. The type of test kit
2. The dispatch frequency

Test kit dispatch scheduling

New Dispatch Request **Step 1** **Step 2**

Full blood count
CRP
Calcium
Urea and Electrolytes
LFT (not AST)
Anaemia Profile - FBC, ESR, Fe, TIBC, Ferritin, B12 (active) and Folate (RBC)

ASAP
Single test
Daily
Weekly
Fortnightly
Every 4 weeks

Register Kit

Once your kit has arrived you should register it using either:

1. QR Code (Mobile only)
2. Enter the number manually

Please scan or upload your Kit order code to register it

Scan QR Code
To scan QR code please click on the button below

CLICK TO SCAN

Please scan QR code or insert order number manually

Order number:
Upload to Server



Step 3 – My Data

Now you registered your kit and sent back your sample, its time to view your data!

The Dashboard

This is where you can access and view your health data and personalised analysis in different forms

Click on the 'Dashboard' tab

Algocyte® Score is a numerical summary of the latest blood test results presented in a single view

Covid Profile

Personalised Covid Score

Covid Score represents the COVID-19 antibody test result, scale from 0 to 10

Personalised Test Score

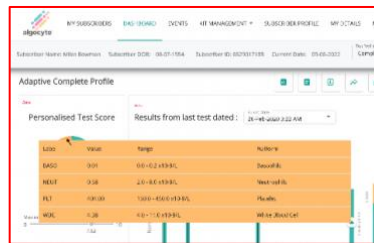
Results panel displays the most recent blood test result, as a bar-chart and reference range for each analyte.

'Adaptive On' - uses historical test results as a baseline to provide a more personalised analysis.

Icon	Action
	Navigates to the Trends Graphs
	Navigates to the Tabular Report
	Navigates to the Individual Report
	Navigates to the Folding Plot
	Generates an Algocyte® Report
	Turns on/off the Adaptive feature <i>Note: the Adaptive feature is on by default.</i>

Algocyte Ring

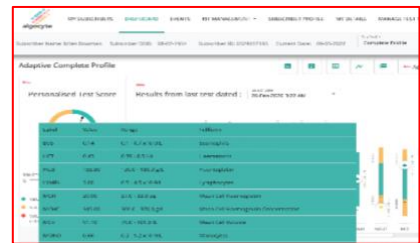
Hovering over the ring and its different colours (Green, Amber and Red) opens more detailed tables on the data presented like the examples below.



Amber Section



Score Example



Green Section

You are now all set up for Algocyte®, the AI that learns from and monitors your health.

Please refer to the user manual for full user experience and support



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Product Information

Technical Specifications

The Algocyte® platform is a cloud-based software product. To operate it, you will need either:

- A PC and associated web browsers
 - Recent version of Chrome, Safari, Edge or Firefox
- Or mobile computing equipment (using Android or iOS)
 - Recent version of Safari or Chrome

Platform Accessibility

The use of the Algocyte® platform requires access to a desktop or mobile computing device. Desktop machines require a modern Internet browser (such as Chrome or Safari); Android and Apple iOS (e.g., iPhone) devices require a modern mobile browser (such as Chrome or Safari). Each option will require third party cookies to be enabled for Algocyte® platform to function properly, and certain non-essential features within Algocyte® platform will not function unless the built-in camera and location services are enabled.

An active subscription will be required to use the Algocyte® home blood testing service, which can be purchased directly from Oxford Immune Algorithmics Ltd.

Safety

These safety alerts are used throughout this manual. Make sure that you always read, understand, and obey all safety alerts.



Please consult the instruction manual thoroughly before using the Algocyte® platform.

Please keep a copy of these instructions for future reference.



CAUTION: The exclamation point within the triangle is a warning sign alerting you of important instructions accompanying the product.

Explanation of symbols

You can find the following safety symbols throughout the manual.

Symbol	Meaning
	Indicates the medical device manufacturer.
	This symbol indicates that a product is in conformity with European Community harmonisation legislation.
	The UKCA (UK Conformity Assessed) marking is a new UK product marking that is used for goods being placed on the market in Great Britain (England, Wales and Scotland).
	Indicates a medical device that is intended to be used as an in vitro diagnostic medical device.
	Indicates the authorized representative in the European Community.
	Indicates the manufacturer's catalog number so that the medical device can be identified.
	Indicates the manufacturer's batch code so that the batch or lot can be identified.

General Precautions

Algocyte® is not a diagnostic or therapeutic device and there are no procedure-related safety requirements. Medical professionals are also advised not to use any part of the data plots or the Algocyte® Score as a replacement for any existing blood test screening.



Algocyte is not a substitute for professional screening and advice from your healthcare professional.

Release Information

These instructions are valid for Algocyte® Platform Release V1.8 (English option).

Algocyte® Platform is compliant with the following regulations:



Algocyte® Platform



Version 1.8.0

European Commission (EC) Directive 98/79/EC for General IVD device and UK Medical Devices Regulations 2002 and for general IVD device.



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Introduction

Thank you for choosing the Algocyte®, a service from Oxford Immune Algorithmics Ltd.

The Algocyte® service consists of the following primary features:

1. Home blood testing kits: blood analyte tests and COVID-19 antibody tests, which can be conducted by users in the comfort of their own home using self-collection kits
2. The Algocyte® platform: a software product that graphically presents home blood test and COVID-19 antibody test results from self-collection kits, as well as enabling collection of other potentially related subject data; a set of algorithms which analyse a user's historical blood test results, in order to provide personalised healthcare information

An example analysis feature is the Algocyte® Score, which provides a single view snapshot of the user's health status.

This manual is a guide on the use and functionality of the Algocyte® platform.

Intended Use

The Algocyte® platform is a data portal and analytical platform for presenting users' health data, which can be input from a range of sources. The Algocyte® platform displays health data in a range of accessible formats, which includes graphics, tables and text. The user has the option of defining the analytical and display parameters, for example, which data to view or whether to view it as raw data or a rolling average over a desired period of time. Algocyte® platform therefore enables the user to view trends in their health data, over time.

The primary application of the Algocyte® platform is to import data relating to blood results obtained from accredited medical laboratories and display this data in the user's desired format. Blood test data imported into the Algocyte® platform can include red and white blood cell counts as well as other blood parameters, such as blood serum results of electrolytes, blood enzyme levels and other components. All data imported into the Algocyte® platform as part of the provided Algocyte® service will have been generated by accredited laboratories.

Users' blood test data can be gathered using the Algocyte® home blood test service but can also be gathered from other in vitro medical devices.

The Algocyte® platform is indicated for use in healthcare and home environments for children 2 years and above, adolescents and adults.



Expected Users

Algocyte® platform supports 3 types of users:

User types	Features
1. Subscribers	individuals who wish to use the platform to gather and share their own, or their families, health data
2. Providers	individuals who wish to use the platform to review others health data, and organise home blood testing kits for others
3. Organisation Administrators	individuals who assist providers with administrative functions only. This user is restricted from accessing any health data.

Algocyte® platform gives Subscribers and Providers the same base functionality but unlocks certain additional features for Providers. Refer to Step 5 of the “User Sign-up and Registration” section to learn more about how to request your provider account access.

Feature summary table

The following table is a guide to locating specific user role content in this manual.

See Section	Feature	Provider	Subscriber	Organisation Administrator
User Sign-up and Registration	Account Creation	X	X	X
Dashboard	Access to test history	X	X	
	Algocyte Scores			
	Access to Adaptive features			
	Adaptive Reports per test Analyte			
	Trending Feature			
	Access to the Trend Graph			
	Access to Tabular Reports			
	Access to Individual Reports			
Events	Entering Events	X	X	X
	Viewing Events on the graphs			
Kit Management	Ordering home test kits	X	X	X
	Registering home test kits			
Profile	Updating User details	X	X	
My Details	Provider and Organisation Admin details	X		X



Manage Test Profiles	Creation of test profiles	X		
My Accounts	Ability for a subscriber to share health data with other subscribers		X	
My Subscribers	Ability for a provider to access the accounts of linked subscribers	X		X * * Restricted from seeing any health data

Key words

These key words highlight the words used on the Algocyte® Platform and their definitions.

Key word	Definition
Algocyte® Score	The Algocyte® Score is a numerical and colour-based system which provides a summary of the subscriber's latest blood test results in a single view.
Covid Score	The Covid Score provides a similar summary to the Algocyte® Score, based upon the subscriber's latest COVID-19 antibody test results rather than their general blood test results.
Analyte (blood)	The substance that is of interest in the analysis (for example: amount of haemoglobin in blood);



Product Set Up

Using Algocyte® platform on a PC

The Algocyte platform® can be accessed by navigating to the Algocyte® website:

<https://uk.algocyte.com> (Users from the UK)

<https://eu.algocyte.com> (Users from the EU)

The application includes user sign-up, and users are encouraged to complete their profiles and grant access to the camera in order to maximise functionality of Algocyte®.

Using the Algocyte® platform on a mobile device

The Algocyte® platform is accessible from your mobile device's browser. Users are encouraged to complete their profiles and grant access to the camera in order to maximise functionality of Algocyte®.

Using the Algocyte® home blood testing service



: The Algocyte® home blood testing service will only be available if the following minimum details have been completed within the user profile:

- Name
- Address
- Subscriber ID number (UK users should use the NHS number)
- Date of Birth
- Gender

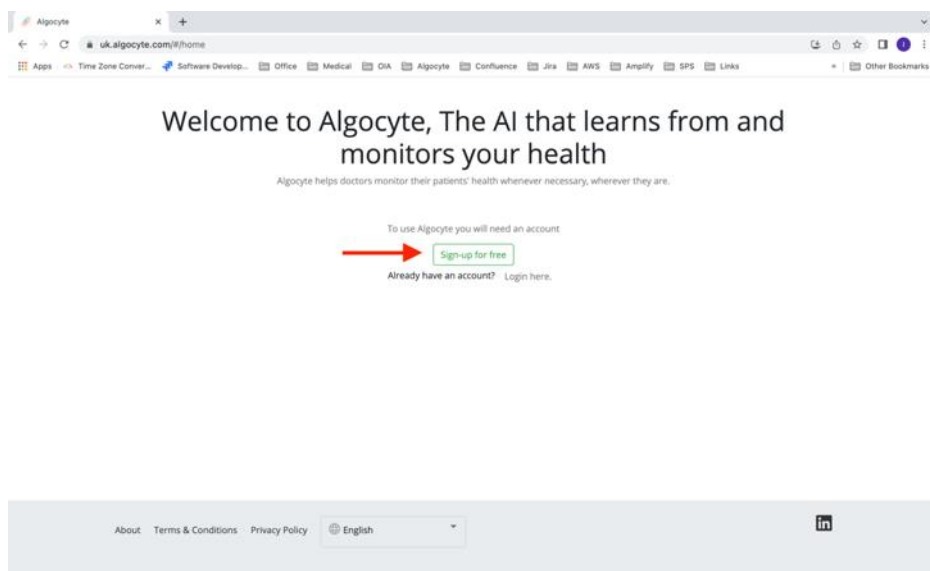


User Sign-up and Registration

To access the Algocyte® platform you will need to create a user account. This is done by following the sign-up process.

Step 1: Find Algocyte®

From the home page (<https://uk.algocyte.com/>), click on the Sign-Up button.



Sign-Up to the Algocyte platform

Step 2: Enter your details

Enter your details, including your email address which will be used for verification and login purposes. Check the box to indicate your acceptance of the Terms and Conditions and click the "Create Account" button.

A screenshot of a web browser showing the Algocyte "Create Account" page. The page has a teal header with the Algocyte logo. On the left, there's a "Welcome Back!" section with a "SIGN IN" button. On the right, the "Create Account" section includes input fields for "First Name", "Last Name", "Display Name", "Email" (pre-filled with "gillian.parker@immunealgorithms.com"), "Password", and "Confirm Password". There's a checkbox for terms and conditions and a "CREATE ACCOUNT" button at the bottom.

Account Creation

Step 3: Verify your account

Enter the verification code which will have been sent to the email you provided. Complete the verification process by clicking on the "Verify Code" button.

Step 4: Start using the Algocyte[®] platform

The Algocyte[®] platform will confirm that your account is ready to use.

A screenshot of the Algocyte "Sign in" page. A modal window is centered on the screen, displaying a green checkmark icon and the text: "Your Algocyte account has now been created and verified. Please sign in with your email address and password." Below the text is an "OK" button. The background shows the "Sign in" form with fields for "Email" and "Password", a "SIGN IN" button, and links for "Terms & Conditions" and "Privacy Policy".

Account Creation



Step 5: Elevate your access level (optional)

You will need to register as a Provider if you intend to use Algocyte® platform to organise the home blood testing service for other Subscribers and/or monitor their blood test results.

To do this, you will need to contact your account representative or email support@algocyte.com. This is a necessary step to ensure that only those registered as Providers are granted the relevant permissions. This process will link your account to your respective organisation and provide you with the necessary permissions to view the details of Subscribers that are linked to you.

The Algocyte® platform unlocks certain additional features for Providers. Further details on these features are provided in summary of feature table in the introduction.

For business support questions please get in touch by emailing us at support@algocyte.com. Please also report any serious incidents involving the Algocyte Platform to Oxford Immune Algorithmics and your local Medical Device Regulatory Authority.



Algocyte® Platform

Following sign-up, access will be granted to the Algocyte® platform. This is divided into 5 main sections:

1. **Dashboard** – for reviewing blood test results and accessing Reports
2. **Events** – for adding additional useful information to the blood test results
3. **Kit Management** – for ordering test kits for the home blood testing service
4. **Profile** – for adding user details
5. **My Accounts** – for managing linked users

By default, users will be shown the Dashboard upon log in.

If you are given provider access to the Algocyte® platform, you will instead have access to the following 7 main sections:

1. **Dashboard** – for reviewing blood test results and accessing reports
2. **Events** – for adding additional useful information to the blood test results
3. **Kit Management** – for ordering test kits for the home blood testing service
4. **Subscriber Profile** – for reviewing user details
5. **My Details** – for adding user details
6. **My Subscribers** – for managing linked users
7. **Manage Test Profiles** – for managing types of blood tests

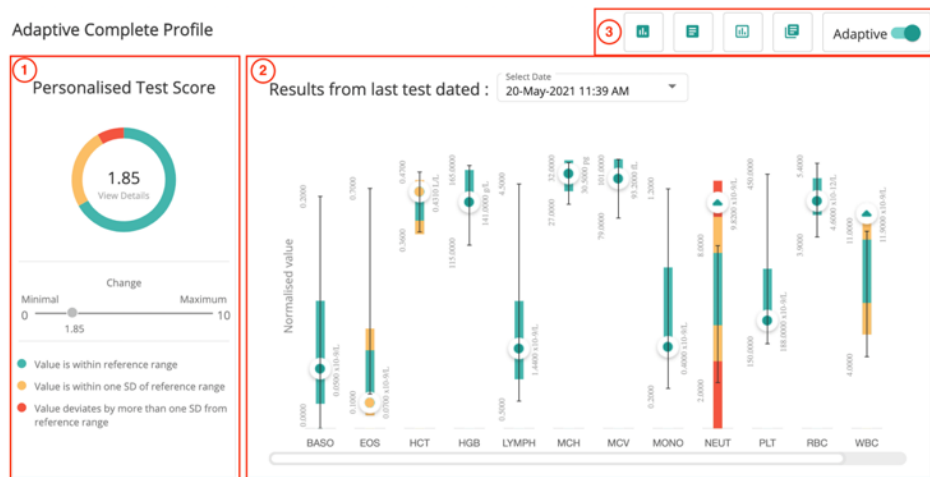


Dashboard

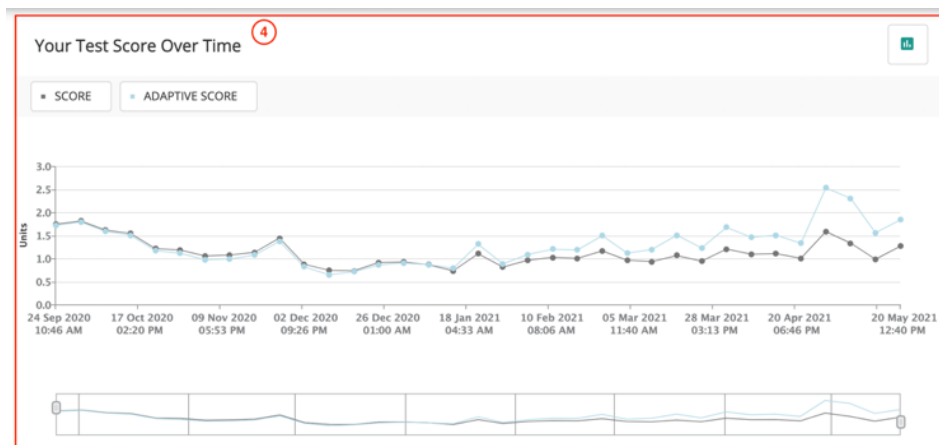
The Dashboard page provides a graphical representation of the subscriber's health data and includes the following sections:

- 1 Algocyte® Score and Covid Score
- 2 Blood test results panel
- 3 Report navigation icons and the Adaptive toggle
- 4 Score over time graph with Event Horizon
- 5 Adaptive graph

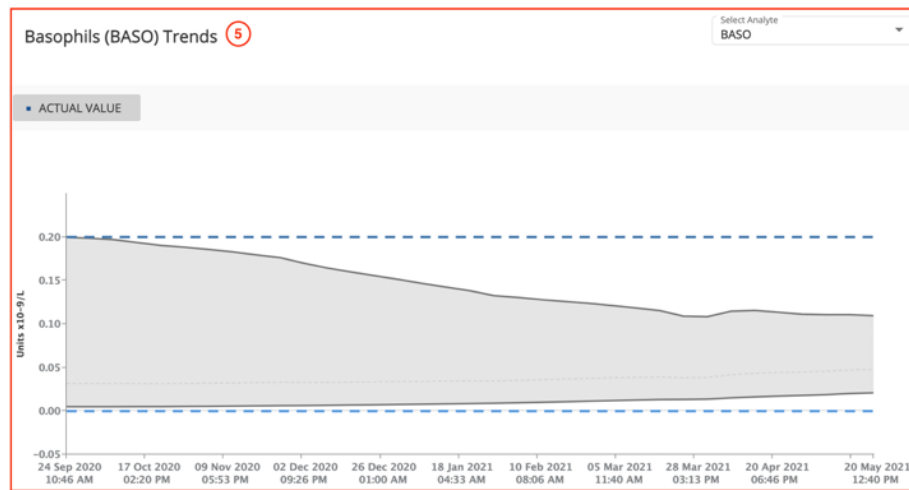
Each section is highlighted in the diagram below.



Test results graph



Score over time graph



Adaptive Trends graph



Algocyte® Score and Covid score

Algocyte® Score

The Algocyte® Score is a numerical and colour-based system which provides a summary of the subscriber's latest blood test results in a single view.

The Algocyte® Score represents deviations from normal population ranges. As a user's blood test results tend towards the reference range limit for the normal population, the numerical score increases and the corresponding score segment changes colour.

Typically, an Algocyte® Score between 8 and 10 would indicate little to no deviation from healthy reference values. A score below 8 may indicate deviation, and the lower the score the greater the deviation from normal health.



Example Algocyte® Score Rings

The Algocyte® Score Ring segments are green when values are within healthy reference values, and turn amber when values are outside of the normal population range (by up to one standard deviation). The segments will turn red when values are far outside the population normal range (by more than two standard deviations).

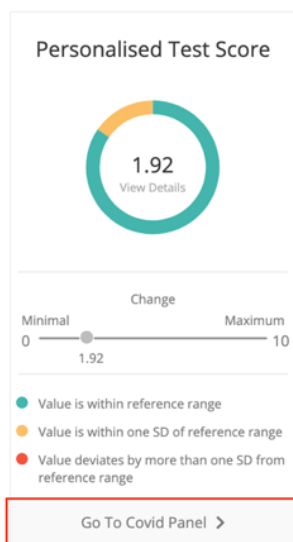
Instead of using normal population reference ranges, a user can opt to use their own blood test results to assess deviation from their normal health. This can be done by switching the Adaptive toggle to the "On" position, to turn on the Adaptive feature. Note that the Adaptive feature will be turned on upon log in by default.

Using the Adaptive feature will show an Adaptive Algocyte® Score, calculated based upon the personalised reference ranges for the subscriber. This will provide a more accurate measure of



any changes in the Subscriber's health because it considers their historical test results as a baseline.

If a subscriber has data relating to both general blood tests and COVID-19 antibody tests, then they will be able to navigate between both scores by pressing on the "Go To --- Panel" option that will appear underneath the Score Ring.



Test panel navigation

Tip: clicking on "View Details" inside the Score Ring will display detailed information about the score.

Covid Score

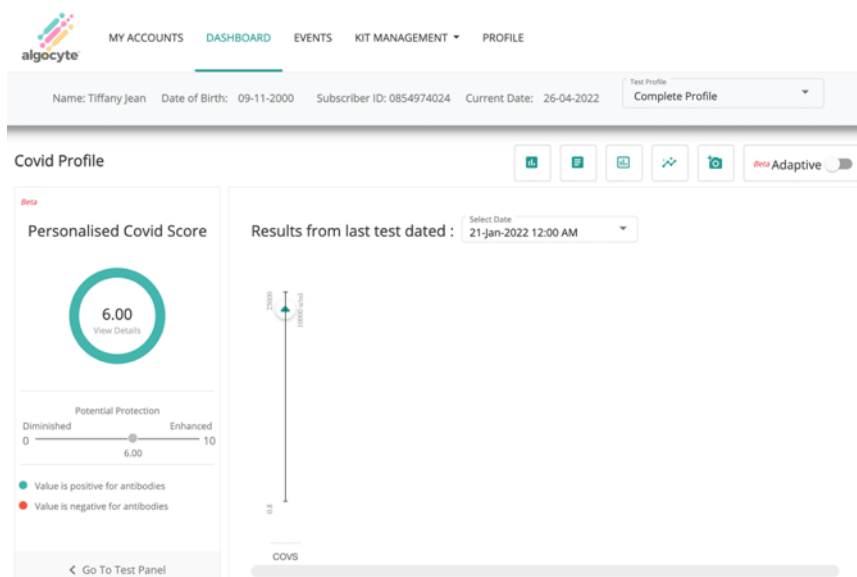
The Covid Score provides a similar summary to the Algocyte® Score, based upon the subscriber's latest COVID-19 antibody test results rather than their general blood test results. An Adaptive Covid Score is likewise available. Two different calculations used to determine the Covid Score, depending upon whether the Adaptive feature is turned On or Off.

The COVID-19 antibody range supplied by the lab conducting the COVID-19 antibody test, ranges from a minimum of 0.8 U/ml to a maximum of 25,000 U/ml. The Covid Score is a measure of how far the test result is from the maximum value possible. So, a user with a very high COVID-19 antibody test result will receive a Covid Score closer to 10, than a user with a very low COVID-19 antibody test result who will receive a Covid Score closer to 0.

When the Adaptive feature is "Off", the Covid Score simply represents the COVID-19 antibody test result, normalised on a scale from 0 to 10. COVID-19 antibody test values below 0.8 U/ml are understood as an absence of any COVID-19 antibodies in the test result, and will lead to a Covid Score of 0.

The Covid Score ring is colour-coded and will show a green or red colour:

- COVID-19 antibodies are present
- COVID-19 antibodies are absent



Covid Test results with Adaptive Off

The following table further describes the relationship between the Covid Score and a COVID-19 antibody test result.

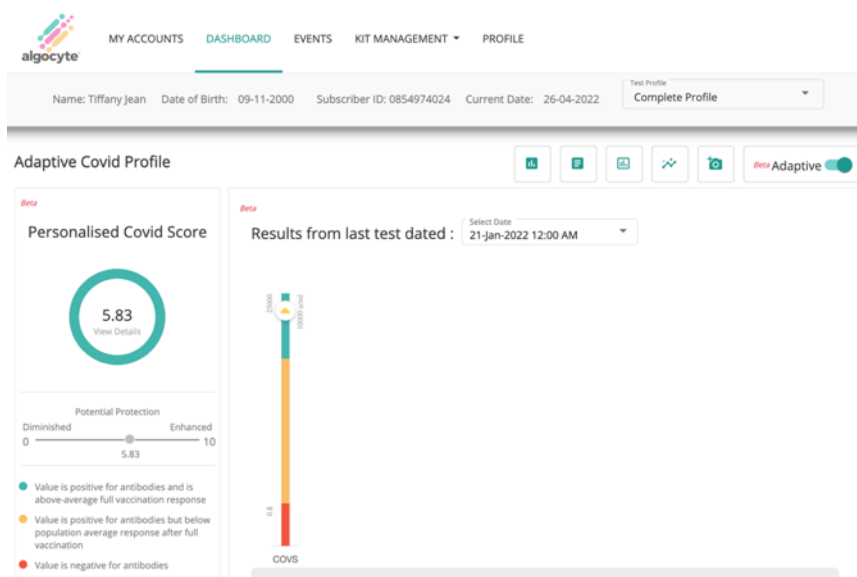
A Covid Score of 0	Is achieved when the COVID-19 antibody test result is below the minimum of 0.8 U/ml
A very low Covid Score	Is a result of a very low COVID-19 antibody test result
A very high Covid Score	Is a result of a very high COVID-19 antibody test result
A Covid Score of 10	Is achieved when the COVID-19 antibody test result is at the maximum of 25,000 U/ml

When the Adaptive feature is “On”, the Covid Score will adapt to the user’s historical COVID-19 antibody test levels, to account for the level of change against the user’s previous highest COVID-19 antibody test result. COVID-19 antibody test values below 0.8 U/ml are understood as an absence of any COVID-19 antibodies in the test result and will lead to an Adaptive Covid Score of 0.

The Adaptive Covid Score was developed as a signal for detecting changes in levels of potential COVID-19 protection. High scores indicate an increase in the level of COVID-19 antibodies and likely higher potential protection; low scores indicate a decrease in the level of COVID-19 antibodies and likely lower potential protection.

The Adaptive Covid Score ring is colour-coded and will show a green, amber or red colour:

- COVID-19 antibodies are present and result is above average full vaccination response
- COVID-19 antibodies are present and result is below average full vaccination response
- COVID-19 antibodies are absent



Covid Test results with Adaptive On



The following table further describes the relationship between the Adaptive Covid Score and a COVID-19 antibody test result.

An increase in the Adaptive Covid Score	Is a result of an increase in COVID-19 antibody levels compared to a previously high level
A decrease in the Adaptive Covid Score	Is a result of a decrease in COVID-19 antibody levels and establishes a new high level

Blood test results panel

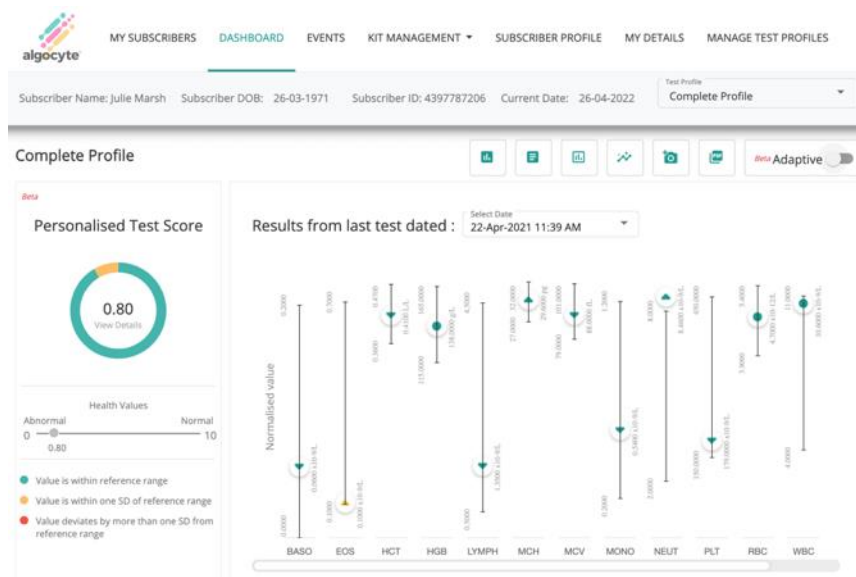
Blood test results panel displays the user's most recent blood test result, as a bar-chart complete with a reference range for each blood analyte.

If a user has data relating to both general blood tests and COVID-19 antibody tests, then they will be able to navigate between both panels by pressing on the "Go To --- Panel" option that will appear underneath the Score Ring.

Blood analyte test results

Blood analyte test results are displayed in a set of bar charts which contain detailed data related to the various blood components measured during the user's blood test. Each data bar is annotated with the lab supplied reference ranges, alongside the units and actual value.

By default, the latest available test data is displayed upon log in. Other blood test results can be displayed by selecting the appropriate test date from the drop-down menu.



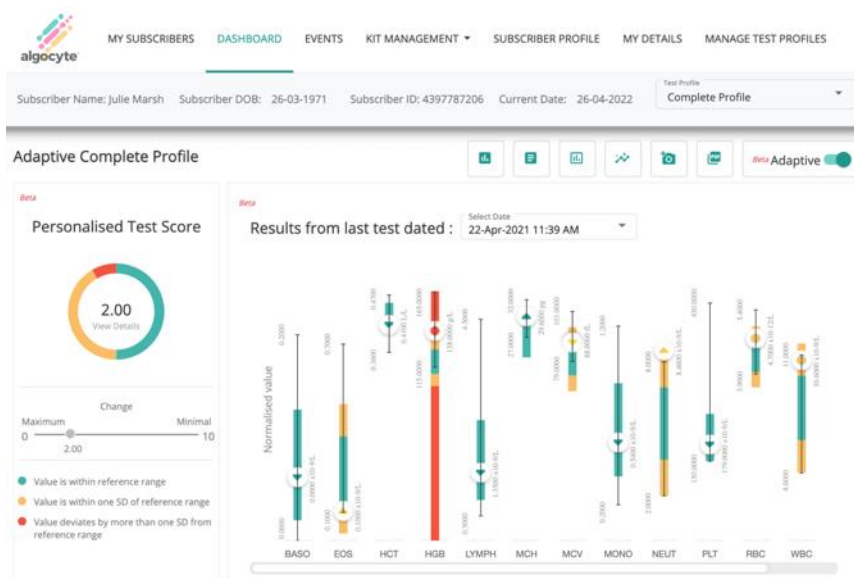
Test results with Adaptive Off

Tip: hovering the mouse pointer over the graph will reveal further information on the underlying data.



Trend indicators are provided on each data bar in the chart. The indicators provide a visual representation of how the latest test result compares to the previous test result. A triangle pointing upwards means that the latest result is trending higher when compared with the previous value. A triangle pointing downwards means that the latest result is trending lower. A circle indicates a very small change (less than 1% difference) between the latest result and the previous one. Only circles will be shown if no previous blood test data is available.

By default, the Adaptive feature will be turned on upon log in. When the Adaptive feature is switched “On”, colour-coded ranges will be shown in each of the data bars. Green bars represent the user’s personalised normal range. Amber bars represent a range that is outside of the user’s personalised normal range (beyond one standard deviation), and red bars represent a range that is far outside the user’s personalised range (beyond two standard deviations). As with the Adaptive Algocyte® Score, the adaptive bar charts will provide a more accurate measure of any changes in the Subscriber’s health because it considers their historical test results as a baseline.

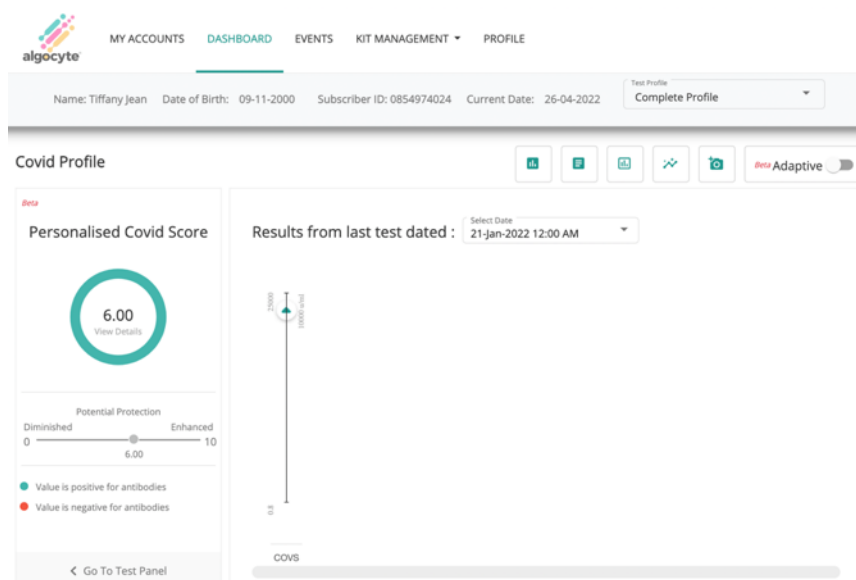


Test results with Adaptive On

COVID-19 antibody test result

The COVID-19 antibody test results are represented in a bar-chart labelled COVS. This can be accessed by pressing on the “Go To --- Panel” option underneath the Score Ring (if the user has COVID-19 antibody test results).

By default, the latest available test data is displayed upon log in. Other blood test results can be displayed by selecting the appropriate test date from the drop-down menu.

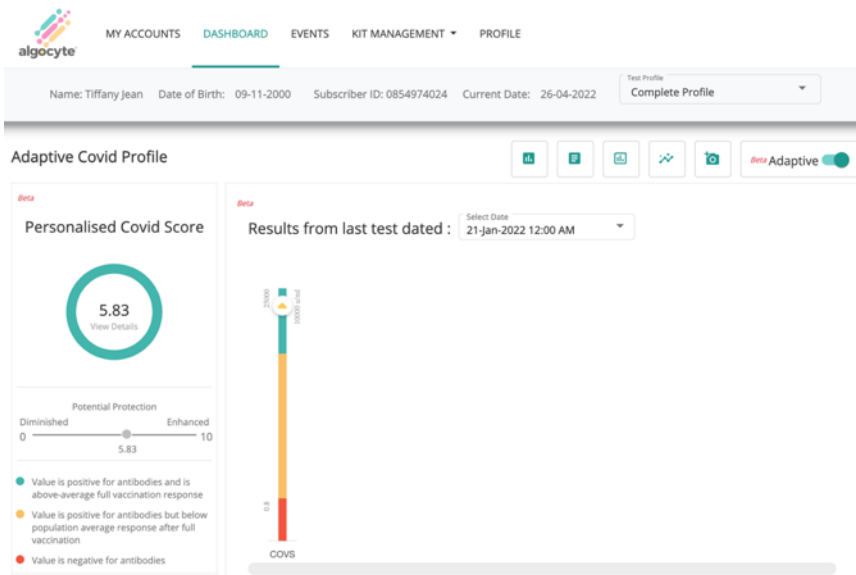


Covid results

The data bar is annotated with laboratory supplied ranges for possible values of COVID-19 antibody levels. The COVID-19 antibody range supplied by the lab conducting the COVID-19 antibody test, ranges from a minimum of 0.8 U/ml to a maximum of 25,000 U/ml. COVID-19 antibody test values below 0.8 U/ml are understood as an absence of any COVID-19 antibodies in the test result.

Similarly, to normal blood analyte test results, the Adaptive feature will be turned on by default. When the Adaptive feature is “On”, color-coded ranges (Green, Amber and Red) will be shown in each of the bars:

- Value is positive for antibodies and is above-average full vaccination response.
- Value is positive for antibodies but below population average response after full vaccination
- Value is negative for antibodies



Covid results



Report navigation icons and the Adaptive toggle

Links for navigating to other reports are presented above the blood test results panel (refer to the [Reports section](#) for a detailed description of each report).

The Adaptive toggle allows you to turn on/off the adaptive feature, described throughout this section.

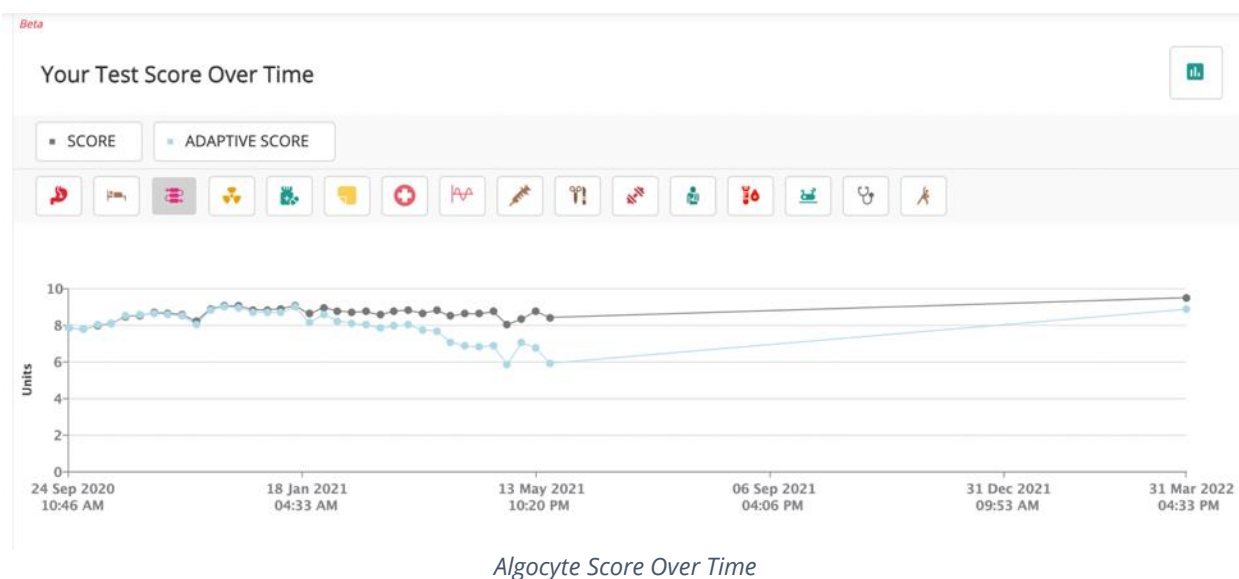
Selection	Icon	Action
Trends Graph		Navigates to the Trends Graphs
Tabular Report		Navigates to the Tabular Report
Individual Report		Navigates to the Individual Report
Folding Plot		Navigates to the Folding Plot
Algocyte® Report		Generates an Algocyte® Report
Adaptive Toggle		Turns on/off the Adaptive feature



Score over time graph with Event Horizon

Algocyte® Score over time

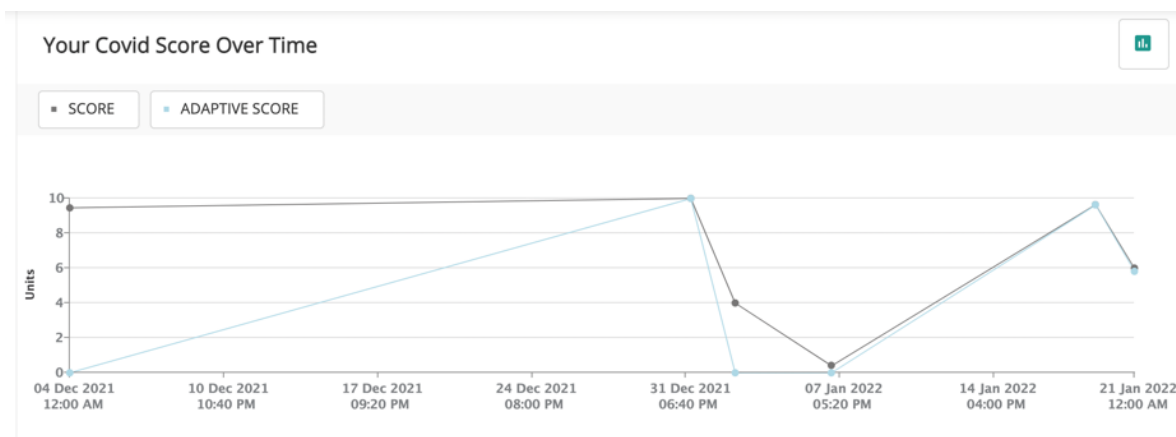
The score over time graph plots the changes of the Algocyte® Score and Adaptive Algocyte® Score, over time.



Tip: clicking on the "Score" or "Adaptive Score" buttons in the graph legend will control the display of the line in the graph. The time slider is used to zoom in or out of a specific date range.

Covid Score over time

If the user has COVID-19 antibody test results available, the score over time can be switched to plot the changes of the Covid Score or the Adaptive Covid Score, over time.



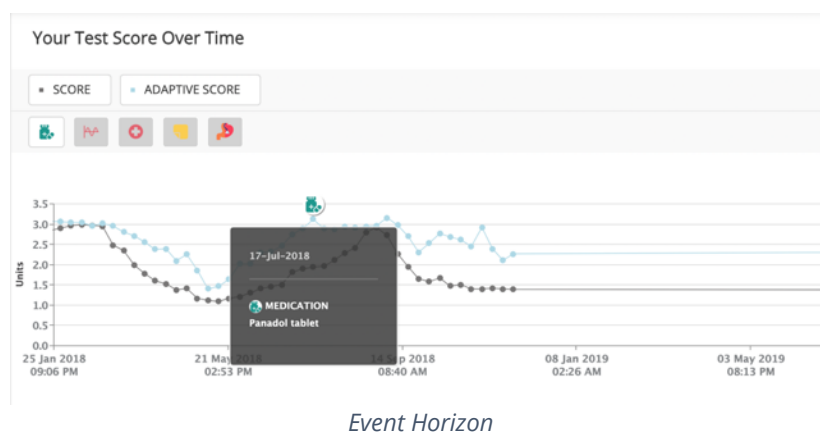
Covid Score Over Time

Tip: clicking on the "Score" or "Adaptive Score" buttons in the graph legend will control the display of the line in the graph. The time slider below is used to zoom in or out of a specific date range.

Event Horizon

If "Events" are associated with any blood test result, then these will be represented by an Event icon next to the appropriate blood test result (refer to the [Events section](#) for a detailed description on how to create Events).

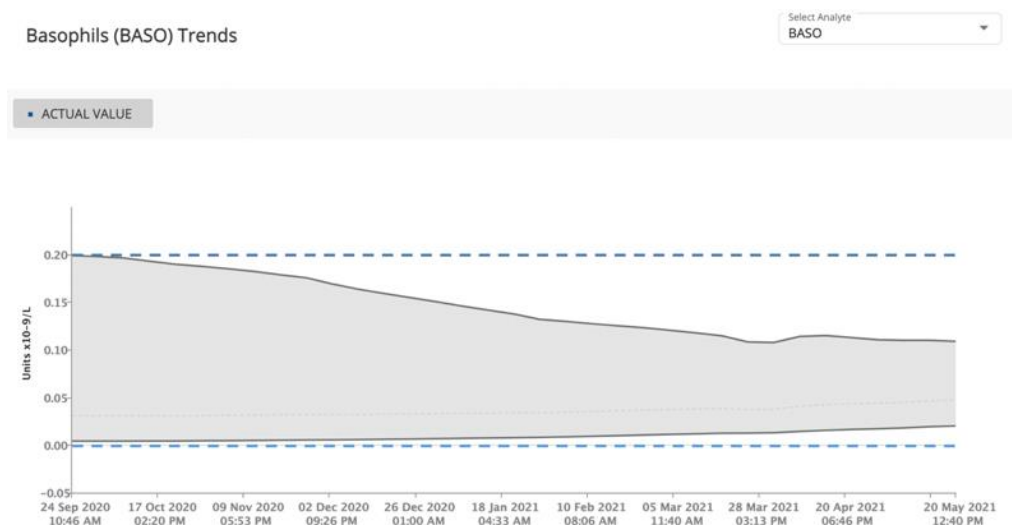
An Event filter can be used to limit which Events are highlighted on the Score over time graph. The details of the Event are displayed upon hovering over an Event icon.



Event Horizon

Adaptive graph

The Adaptive graph offers the most detailed view of changes per analyte, over time. Start by selecting the analyte of interest from the drop-down list. The displayed plot displays population and personalised (i.e. Adaptive) reference ranges, as well as actual and mean values per test date.



Adaptive Graph

Tip: clicking on the "Actual Value" button in the graph legend will control the display of that data in the graph. The time slider below is used to zoom in or out of a specific date range.



Reports

The Reports available from the Dashboard page provides five different views for a user's health data.

1. Trends Graph with Event Horizon: plots a graph of all blood analyte values, over time
2. Tabular Report: provides a table of all blood analyte values, over time
3. Individual Report: provides a table of blood analyte values, on a selected date
4. Folding Plot: plots the recurrent values of a selection of blood analytes, over time
5. Algocyte® Report: provides a summary of blood analyte values, for easy printing or electronic distribution

By default, all available blood analytes are displayed in the first three report views; this is referred to as the Complete Analyte Profile. Particular "Test Profiles" can be defined to narrow the range of these reports to include only those blood analytes of interest.

Trends Graph

By default, this report view will automatically provide the data for all available test dates. The start and end dates for the graph may be chosen manually, or a pre-defined date range can be selected (Year, Month or Week).

Year Ago

Month Ago

Week Ago

Choose Start date

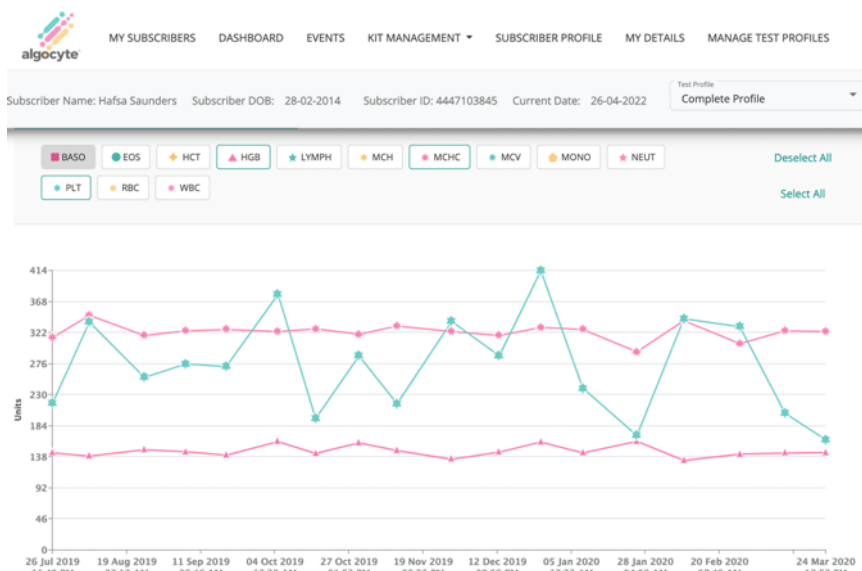
Choose End date

10 December 2020

07 December 2021

Test Date selector

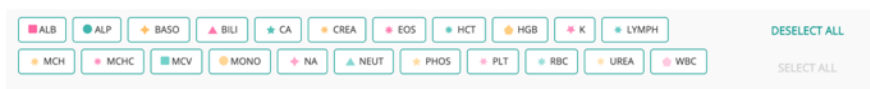
The Trends Graph plots the blood analyte results over time, providing a detailed view of their changes. The dates in the x-axis correspond to the test date and the y-axis shows the blood test value for each blood analyte.



Trend Graph

Tip: hovering the mouse pointer over the data points will display the test date and the analyte value.

Each blood analyte can be included or excluded for display. This is to avoid cluttering the graph with multiple reference ranges that might overlap.

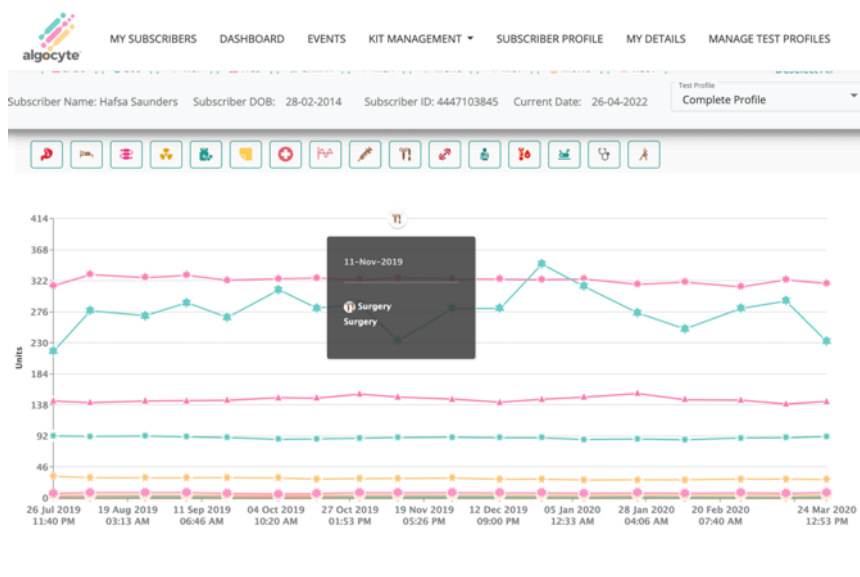


Analyte Selector

The units on the y-axis will change based upon the required range for the blood analytes selected. To ensure an optimal display when viewing multiple blood analytes, consider selecting those blood analytes with similar units of scale for simultaneous review.

Event Horizon

If “Events” are associated with any blood test result, then these will be represented by an Event icon next to the appropriate blood test result. An Event filter can be used to limit which Events are highlighted on the Trend graph. The details of the Event are displayed upon hovering over an Event icon.



Event Horizon



Tabular Report

By default, this report view will automatically provide the data for all available test dates. The start and end dates for the graph may be chosen manually, or a pre-defined date range can be selected (Year, Month or Week).

Year Ago

Month Ago

Week Ago

Choose Start date
10 December 2020

Choose End date
07 December 2021

Test Date selector

The Tabular Report details the blood analyte results over time in a text-based report, providing a row per blood test result. The number of results given per page is configurable between 10 and 100.

All blood analytes represented in the selected Test Profile are displayed. Additionally, there is a column to the right of the table, which shows any additional data that has been associated with a given blood test result using the “Tags” feature, which is a mechanism allowing users to add information related to a specific blood test.

The Tabular Report is colour coded, with red being used to highlight values that are outside of the normal reference range.

Data within the Tabular Report can be exported in any of three formats: Excel, Comma Separated Variable (CSV) or JavaScript Object Notation (JSON). This facilitates further data processing outside of the Algocyte® platform, if wished.

MY SUBSCRIBERS DASHBOARD EVENTS KIT MANAGEMENT SUBSCRIBER PROFILE MY DETAILS MANAGE TEST PROFILES

Subscriber Name: Hafsa Saunders Subscriber DOB: 28-02-2014 Subscriber ID: 4447103845 Current Date: 26-04-2022

Test Profile
Complete Profile

DATE	BASO	EOS	HCT	HGB	LYMPH	MCH	MCHC	MCV	MONO	NEUT	PLT	RBC	WBC	SUPPLEMENTARY
	x10-9/L	x10-9/L	L/L	g/L	x10-9/L	pg	g/L	fL	x10-9/L	x10-9/L	x10-9/L	x10-12/L	x10-9/L	
26-Jul-2019	0.04	0.25	0.4	144.4	2.74	32.8	315.0	92.6	0.75	3.72	218.0	4.8	7.5	No Tags
07-Aug-2019	0.02	0.25	0.42	139.5	3.71	28.7	348.0	91.1	0.81	5.07	338.0	5.1	9.86	No Tags
24-Aug-2019	0.05	0.15	0.45	149.0	1.99	30.3	318.0	93.7	0.71	6.17	256.0	5.1	9.07	No Tags
06-Sep-2019	0.01	0.25	0.34	146.0	3.14	32.8	325.0	89.2	0.71	3.45	276.0	4.6	7.56	No Tags
19-Sep-2019	0.06	0.18	0.43	140.9	2.57	29.6	327.0	87.6	0.99	2.15	272.0	5.1	5.95	No Tags
05-Oct-2019	0.07	0.28	0.37	161.0	1.86	28.0	324.0	85.7	0.71	3.71	379.0	5.4	6.63	No Tags
17-Oct-2019	0.07	0.21	0.49	143.5	2.61	28.8	328.0	91.4	0.73	5.54	195.0	4.3	9.16	No Tags
30-Oct-2019	0.03	0.15	0.46	159.2	2.9	31.6	320.0	90.3	0.55	6.37	288.0	4.8	10.0	No Tags
11-Nov-2019	0.03	0.13	0.41	147.7	2.56	28.6	332.0	88.7	0.46	3.68	217.0	5.1	6.86	No Tags

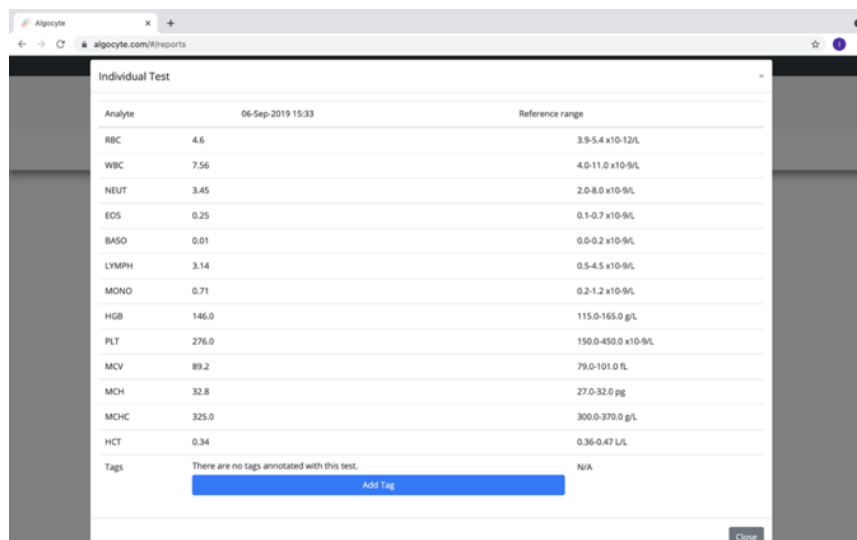
Tabular Report

Individual Report

The Individual Report details the blood analyte test results for a single blood test, complete with any additional data that has been associated with a given blood test using the “Tags” feature. Once the date for the required blood test has been selected, the results for all blood analytes tested on that date are displayed.

Each row of the Individual Report represents a given blood analyte, and the test results for each are displayed alongside their reference range. If more than one blood test was administered on the selected date, then each blood test result will be given its own column.

Within the Individual Report, it is possible to “Tag” additional information onto a given blood test result.



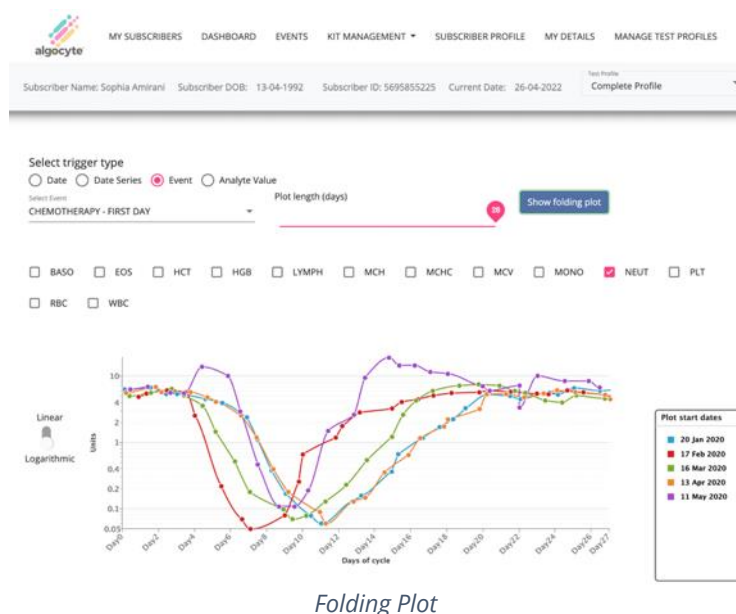
Analyte	06-Sep-2019 15:33	Reference range
RBC	4.6	3.9-5.4 x10 ¹² /L
WBC	7.56	4.0-11.0 x10 ⁹ /L
NEUT	3.45	2.0-8.0 x10 ⁹ /L
EOS	0.25	0.1-0.7 x10 ⁹ /L
BASO	0.01	0.0-0.2 x10 ⁹ /L
LYMPH	3.14	0.5-4.5 x10 ⁹ /L
MONO	0.71	0.2-1.2 x10 ⁹ /L
HGB	146.0	115.0-165.0 g/L
PLT	276.0	150.0-450.0 x10 ⁹ /L
MCV	89.2	79.0-101.0 fL
MCH	32.8	27.0-32.0 pg
MCHC	325.0	300.0-370.0 g/L
HCT	0.34	0.36-0.47 L/L
Tags	There are no tags annotated with this test. Add Tag	

Individual Report

Folding Plots

The Folding Plot is a specialist visualisation of blood analyte behaviour, designed to reveal patterns following a repeated trigger; it was developed in conjunction with a consultant paediatric oncologist, to explore patterns in a user's response to particular treatment events.

The Folding Plot facilitates a comparison across time periods, allowing users to assess the impact of different treatment courses. As an example, in the case of chemotherapy treatments, the Folding Plot could be used to establish the likelihood of infection due to neutropenia.



Folding Plot

To view the Folding Plot, you will need to choose:

1. A trigger type
2. A Folding Plot length, and
3. Blood analytes to plot (up to two)

Step 1: Decide on the trigger type for your Folding Plot. There are four different options to select from; the type you choose will be the trigger for the starting point of each cycle in the plot.

Trigger Types:

- Date: allow selection of a start and end date for the Folding Plot
- Date Series: allows select of a specific date series (this option is useful when the data is spread out across multiple time periods)



- Event: allows selection of an event that has been previously recorded in the health data
- Analyte Value: allows selection of a blood analyte value

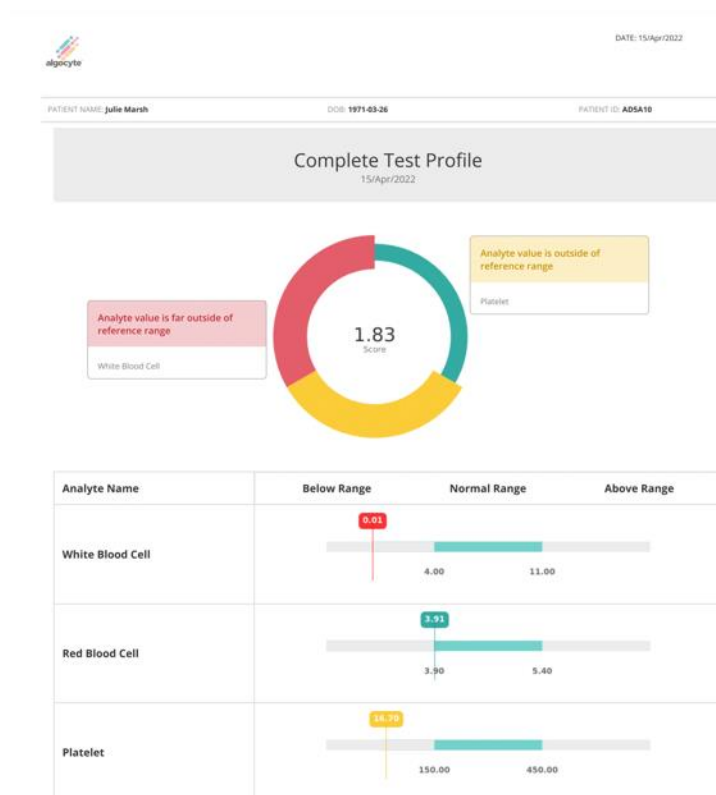
Step 2: Decide on the length of each Folding Plot cycle. Use the toggle to specify the number of days within a cycle; make sure to pick a plot length that is long enough to cover the frequency of available blood test results.

Step 3: Pick the blood analytes that you want to include in the Folding Plot and click on the "Show Folding Plot" button.



Algocyte[®] Report

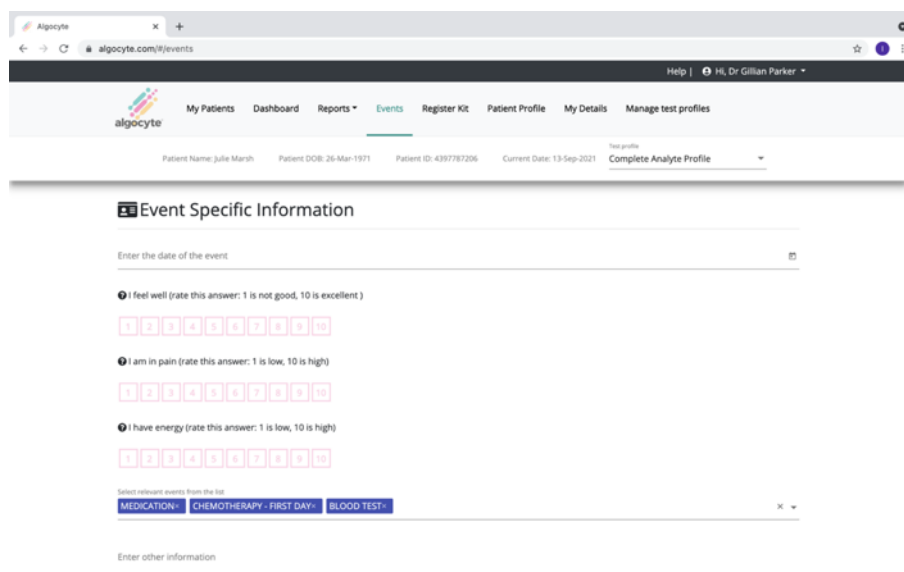
Algocyte[®] Reports are snapshot summaries of blood test results, optimised for printing and electronic distribution. They can be generated at any time from the Dashboard for a particular blood test date. The report presents the blood test result information in a graphical manner and in particular, highlights the Algocyte[®] Score and any blood analyte values lying outside the normal reference range.



Algocyte[®] Report

Events

An Event is additional information which is not blood analyte result. Events can be added by the user to log information such as vaccinations, treatments or fevers. Multiple Events can be selected for addition from a predefined list, and it is also possible to add details in free text.



The screenshot shows the Algocyte web application interface for adding an event. The top navigation bar includes links for My Patients, Dashboard, Reports, Events (active), Register Kit, Patient Profile, My Details, and Manage test profiles. Below the navigation bar, patient information is displayed: Patient Name: Julie Marsh, Patient DOB: 26-Mar-1971, Patient ID: 4397787206, and Current Date: 13-Sep-2021. The main section is titled "Event Specific Information" and contains a form with the following fields:

- Enter the date of the event (with a calendar icon)
- I feel well (rate this answer: 1 is not good, 10 is excellent) (with a rating scale from 1 to 10)
- I am in pain (rate this answer: 1 is low, 10 is high) (with a rating scale from 1 to 10)
- I have energy (rate this answer: 1 is low, 10 is high) (with a rating scale from 1 to 10)
- Selected relevant events from the list (with a dropdown menu showing "MEDICATION", "CHEMOTHERAPY - FIRST DAY", and "BLOOD TEST")
- Enter other information (with a text input field)

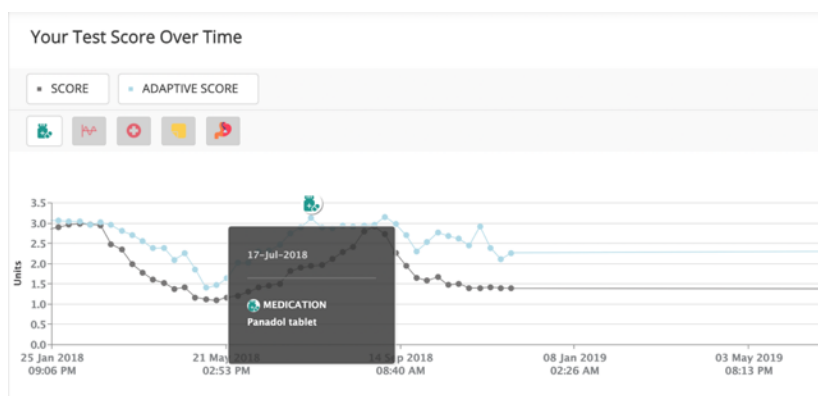
Adding an Event

The following is a list of the Event types that are available to pick from:

- Endoscopy
- Outpatient
- Procedure
- Radiology
- Medication
- Note
- Diagnose
- Chemotherapy
- Blood Transfusion
- In Patient
- Blood Test
- Exercise Moderate
- General Practitioner
- Exercise Light

Event Horizon

Once entered, Events will be summarised by Event icons on the Score over time and Trends graphs; the details of the Event are displayed upon hovering over an Event icon.



Events on a Score Graph

Tags

Closely related to Events are Tags, which are recorded for a particular test result. This feature allows subscribers and providers to annotate a test report with additional information, such as whether the subscriber was fasting prior to the test or not. You can select from a pre-defined list of tags or enter a custom one as required in the text box.

The information entered will be stored alongside the test result record and will be available for viewing by both the provider and the subscriber.

Add tags to this test

Select one or more tags from the list

I consumed alcohol prior to this test

I hadn't eaten for 24 hours prior to this test

Enter custom tags if you can't find the right ones in the list

I did a vigorous exercise prior to this test

save

Close

Entering a Tag

You add a new Tag or edit an existing Tag in two ways:

- From the Individual report, click on the “Add Tag” and enter the information and click Save.
- From the tabular report, double-click on a test result and then click on the “Add Tag”.



Kit Management

The Algocyte® home blood testing service allows Subscribers, Providers and Organisation Administrators to arrange for home blood testing kits to be sent to a selected subscriber (via the address registered on their profile).

The drop-down menu allows the user to both order and register these kits.

Ordering Kit

To order a home blood test kit, its dispatch must be scheduled. To schedule a test kit dispatch, you will need to choose:

1. The type of test kit, and
2. The dispatch frequency

Test kit dispatch scheduling

New Dispatch Request

Select test

Step 1

- Full blood count
- CRP
- Calcium
- Urea and Electrolytes
- LFT (not AST)
- Anaemia Profile - FBC, ESR, Fe, TIBC, Ferritin, B12 (active) and Folate (RBC)

Select frequency of kit dispatch

Step 2

- ASAP
- Single test
- Daily
- Weekly
- Fortnightly
- Every 4 weeks

Test kit scheduling

Step 1: Choose the type of test to schedule from the available tests listed drop-down list.

Step 2: Choose the desired frequency for the test dispatch. Complete the request by clicking on the save button.

The history of any scheduled home blood test kits can be viewed in the Dispatch Request Schedule. The information presented includes the date of the test, type of test, the test requester and the dispatch status.

Test kit dispatch scheduling

New Dispatch Request

Select test Select frequency of kit dispatch

save

Dispatch request schedule

Filter

☐ 	Date	Test kit type	requester	Date of request	Status	Timestamp
☐	25-Mar-2022	OI013	Tiffany Jean	25-Mar-2022	Cancelled	18:38 25-Mar-2022
☐	25-Mar-2022	OI013	Tiffany Jean	25-Mar-2022	Cancelled	11:13 26-Mar-2022
☐	26-Mar-2022	OI013	Tiffany Jean	26-Mar-2022	Scheduled	09:35 26-Mar-2022
☐	26-Mar-2022	OI013	Tiffany Jean	26-Mar-2022	Scheduled	11:10 26-Mar-2022
☐	26-Mar-2022	OI013	Tiffany Jean	26-Mar-2022	Scheduled	11:20 26-Mar-2022
☐	28-Mar-2022	OI013	Tiffany Jean	28-Mar-2022	Scheduled	07:41 28-Mar-2022

Test Kit dispatch status table

Algocyte® platform displays the status of each individual dispatch request, from “Scheduled” (which denotes the initial request) to “Dispatch requested” when the kit order is placed through to “Results Available” when the results arrive from the lab. All test requests are shown by default, and a filter can be applied to the Status column to focus on particular requests.

Dispatch requests can be cancelled any time before the test kit has been dispatched. Cancellation is requested by selecting an individual dispatch request and then selecting the trash can icon; a group of dispatch requests can also be selected.



Registering Kit

Each home blood test kit contains an Order Number, which should be entered into the Algocyte® platform as part of the self-testing process. This is done by selecting the Register Kit tab and submitting the required information.

The screenshot shows the 'KIT MANAGEMENT' tab selected in the top navigation bar. Below the navigation bar, user information is displayed: Name: Tiffany Jean, Date of Birth: 14-02-2015, Subscriber ID: 0854974024, Current Date: 18-04-2022. A 'Test Profile' dropdown menu is set to 'Complete Profile'. The main heading is 'Please scan or upload your Kit order code to register it'. On the left, there is a 'Scan QR Code' section with a QR code icon and a 'CLICK TO SCAN' button. On the right, there is a section for manual entry: 'Please scan QR code or insert order number manually', an 'Order number' input field, and an 'Upload to Server' button.

Registering a Kit

Upon registering a kit, the user will be asked to complete a questionnaire to capture pertinent background information from the day of their test.

The screenshot shows a 'Health questionnaire' form overlaid on the Algocyte platform. The form title is 'Please answer these questions to register your test'. It contains several questions with radio button or dropdown answers: 'Was this blood test requested by your doctor?' (No/Yes), 'Have you performed any rigorous exercise around the time of this test?' (No/Yes), 'Had you consumed significant amounts of alcohol the time of this test?' (No/Yes), 'What was the purpose of this blood test?' (dropdown), 'On a scale of 1-10, how well and healthy did you feel at the time of this test?' (1-10 scale), 'What symptoms, if any, were you experiencing at the time of this test?' (text input), 'What new medication, if any, did you start around the time of this test?' (text input), 'What medical procedure, if any, did you undergo around the time of this test?' (text input), 'Which international destinations, if any, did you travel to around the time of this test?' (text input), and 'Please include any additional information that you feel is relevant to your test.' (text input).

Health questionnaire



Blood analyte tests (e.g. a full blood count) are the primary source of the user's health data which is stored and managed in Algocyte® platform. This data can come from two sources:

1. Home blood test kits, provided as part of the Algocyte® home blood testing service
2. Third party (i.e. non-Algocyte®) laboratory blood test results

The user will be asked to complete a questionnaire in both cases.

Profile

Details about the user are recorded in the Profile page, which is broken down into two sections:

1. Demographic information.
2. Clinical information.

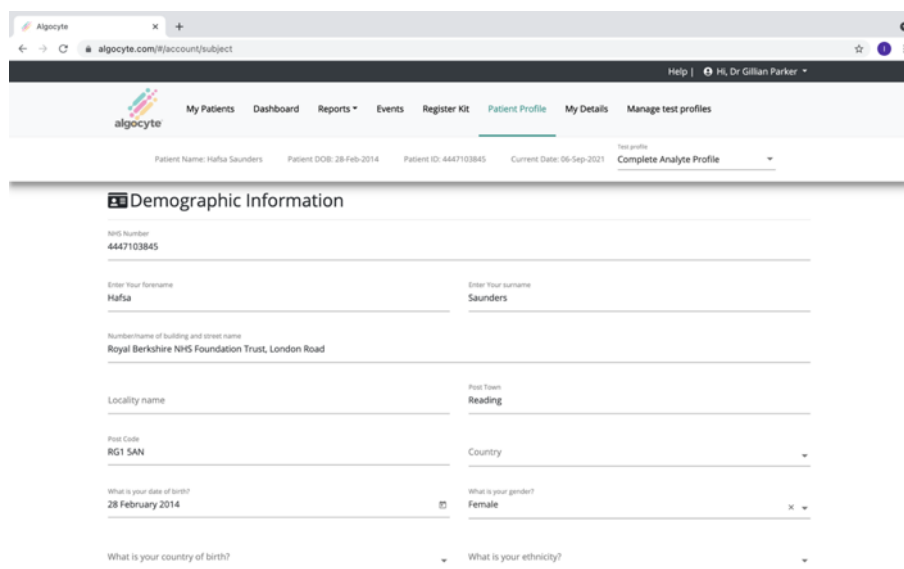
Demographic information

This section includes non-clinical information on the user, including their Identification Number, names, home address, date and country of birth, ethnicity, height, weight and email address.



The Algocyte® home blood testing service will only be available if the following minimum details have been completed within the user profile:

- Name
- Address
- Subscriber Id (UK users should use the NHS number)
- Date of Birth
- Gender

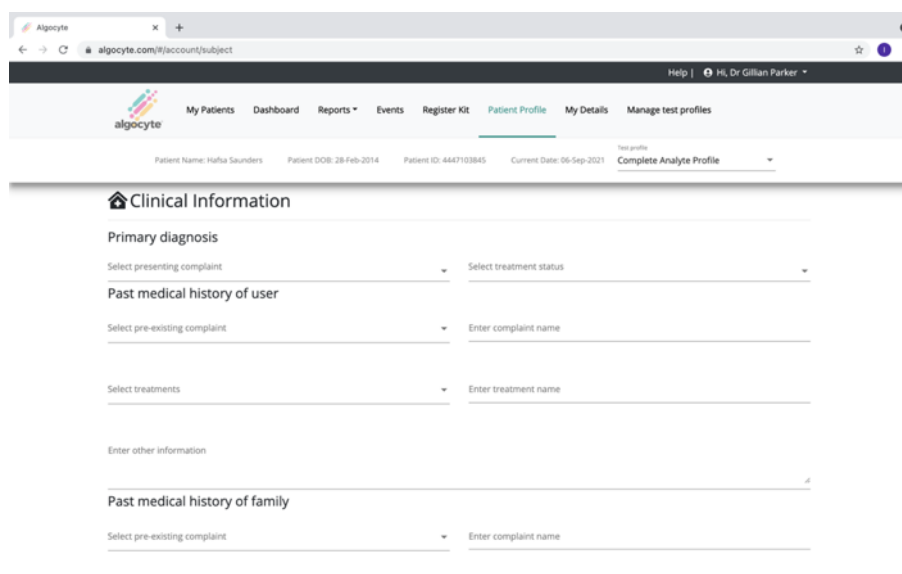


The screenshot shows the Algocyte web application interface. The top navigation bar includes links for My Patients, Dashboard, Reports, Events, Register Kit, Patient Profile (active), My Details, and Manage test profiles. Below the navigation bar, patient details are displayed: Patient Name: Hafsa Saunders, Patient DOB: 28-Feb-2014, Patient ID: 4447103845, Current Date: 06-Sep-2021. The main section is titled 'Demographic Information' and contains several input fields: NHS Number (4447103845), Enter Your forename (Hafsa), Enter Your surname (Saunders), Number/name of building and street name (Royal Berkshire NHS Foundation Trust, London Road), Locality name, Post Code (RG1 5AN), Post Town (Reading), Country (dropdown), What is your date of birth? (28 February 2014), What is your gender? (Female), What is your country of birth? (dropdown), and What is your ethnicity? (dropdown).

Demographic Information

Clinical information

This section includes clinical information on the user, including their presenting complaint, treatment status, pre-existing complaints, historical treatments, the past medical history of their family, allergies, medication history, smoking and alcohol usage and details of their GP.



The screenshot shows the Algocyte Patient Profile page for a patient named Hafsa Saunders. The page is titled "Clinical Information" and contains several sections for data entry:

- Primary diagnosis:** Includes a dropdown for "Select presenting complaint" and a dropdown for "Select treatment status".
- Past medical history of user:** Includes a dropdown for "Select pre-existing complaint" and a text input for "Enter complaint name".
- Select treatments:** Includes a dropdown for "Select treatments" and a text input for "Enter treatment name".
- Enter other information:** A text input field.
- Past medical history of family:** Includes a dropdown for "Select pre-existing complaint" and a text input for "Enter complaint name".

Clinical Information



My Accounts

Note: this section is only applicable for Subscriber accounts.

Algocyte® platform allows users to securely link to one another using an explicit access authorisation code. This feature allows users to share their health data, and for them to be managed from a single account as might be required within a family group. The sharing is one-way and requires explicit access to be granted between the accounts. To allow for two-way sharing, you will need to setup the access permissions on both subscriber accounts.

Generating a user link

To share your health data with other users, you first need to a link to that other user. This link is established using a secure link code generated by Algocyte® platform.

The linking code is generated by clicking on the “Get Code” button from the “My Accounts” page.

Linked Account Information

CODE
767783

Code Expires in 12 Hours
18/04/2022 16:21:10

Get Code

Test Julie Marsh

Linked at
14-04-2022 4:51:28

Remove Link

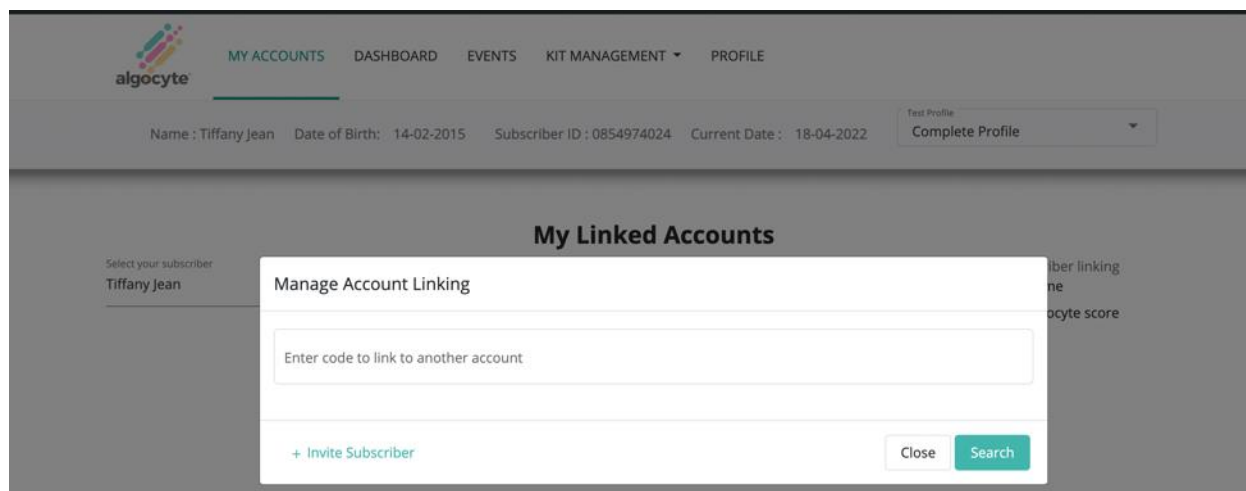
Linked Account

If supplied to another user, this linking code will grant them to access your health data if they verify the link.

At any point, you can remove a previously linked account by clicking on the “Remove Link” button within your Profile page.

Verifying a user link

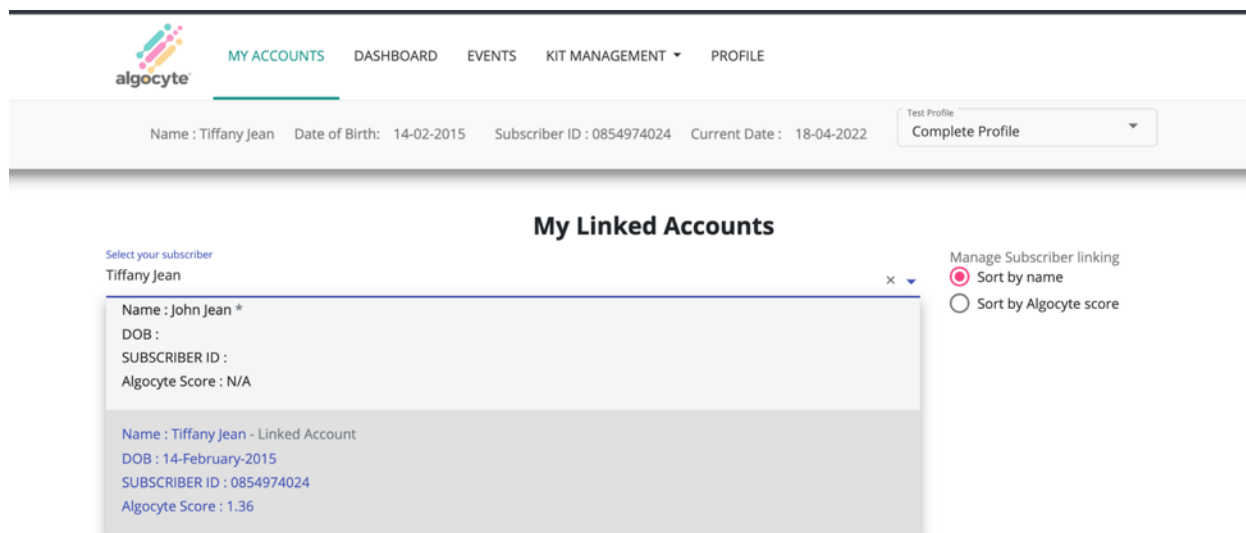
To link to another user, you will first need the linking code which they generated. Once the code has been received, click on the Manage Linked Account button from the “My Accounts” page, and search using the linking code.



Manage Account Linking

Tip: click on the "Invite Subscriber" button to send an account linking invitation email to another user, with instructions on how to generate a linking code.

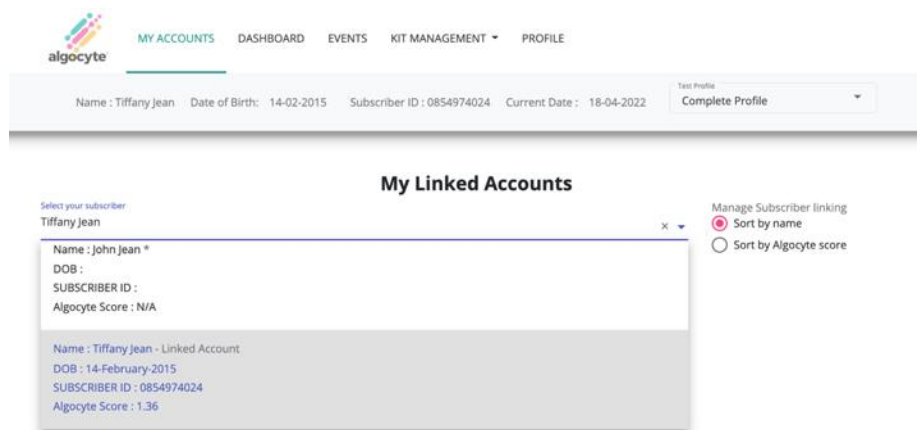
If the link is successfully verified, you will see the linked account listed in the "My Linked Accounts" drop down list.



My Linked Accounts

Reviewing a linked user

From the list of linked users in the “My Linked Accounts” drop down list, click on the chosen account. You can sort the list of users within the drop-down list, by name or by their current Algocyte® Score. Only users that you are authorised to view are presented in this list.



My Linked Accounts

Tip: start typing the name of the user to perform a search.

Once the user has been selected, proceed to the Dashboard where you can view the latest health data for this linked user. The header bar will display the linked user's details; whilst this is displayed, you can record Events, order kits, and register kits on their behalf.

To get back to your personal account, click on “My Accounts” and select your own account from the list (designated with a *).

At any point, you can remove a previously linked account by clicking on the “Remove Link” button within your Profile page.



Additional details for Providers

Note: this section is only applicable for Provider accounts.

My Details

The My Details page allows you to modify your Provider information. Within this page, you can modify your registered email address, full name and Provider ID. Adding a Provider ID provides an identifier throughout the Algocyte® platform but is not compulsory.

algocyte MY SUBSCRIBERS DASHBOARD EVENTS KIT MANAGEMENT SUBSCRIBER PROFILE MY DETAILS MANAGE TEST PROFILES

Provider Information

Enter your full name Gillian Parker	Enter your Provider ID 123456789
Enter your email address gillian.parker@immunealgorithms.com	Select organisation CAMBRIDGE UNIVERSITY HOSPITALS NHS FOUNDATION TRUST

save

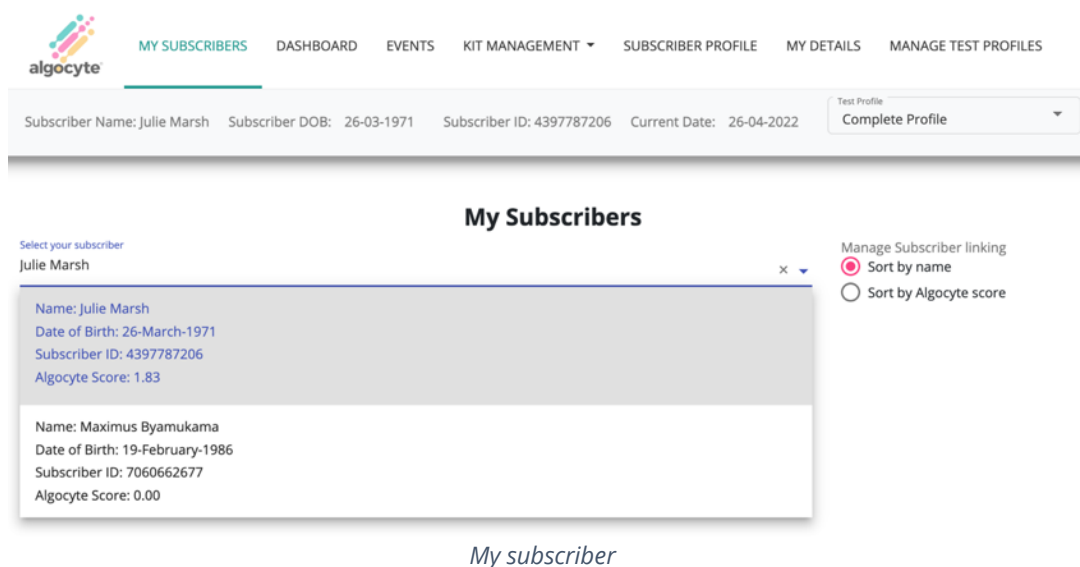
Provider Information

My Subscribers

Reviewing a linked user

In order to use Algocyte® platform to access a specific Subscriber's health data, you must first select the subscriber from the list of linked subscribers. Only subscribers that you are authorised to view are presented in this list. Use the My Subscribers drop-down list to see the available options and make a selection.

You can sort the list of subscribers within the drop-down list, by subscriber name or by their current Algocyte® Score.

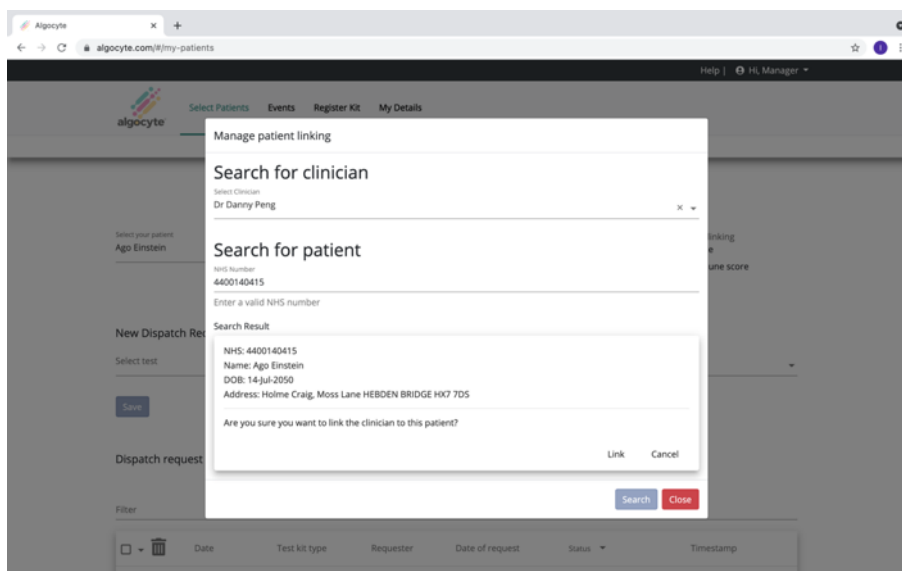


Tip: start typing the name of the subscriber to perform a search.

Manage a linked user

If the subscriber is not already listed in your drop-down menu, you can add them by linking your account to their account. You can do this by selecting the "Manage subscriber linking" option. You will need to enter your subscriber's Identification Number to search within the Algocyte® platform. When their details have been found, Algocyte® platform will display these for your confirmation before you link to that subscriber.

To link a new subscriber to your account: select your provider account from the drop-down list, then perform a search to find the subscriber via their ID. Click on the "Link" button and save.



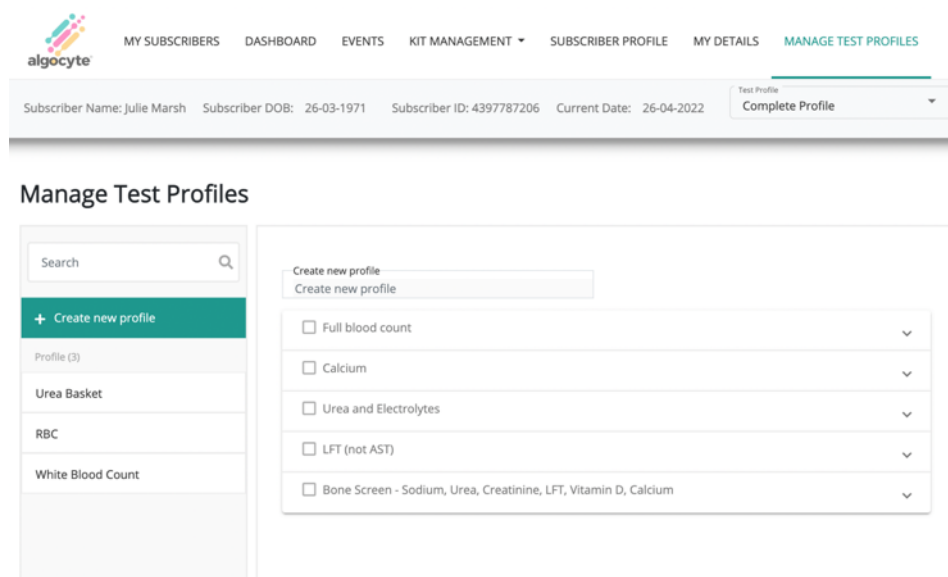
Linking to a subscriber

To unlink a subscriber from your account: select your provider account from the drop-down list, then perform a search to find the subscriber via their ID. Click on the “Unlink” button and save.

Manage Test Profiles

To allow you to focus on analytes of interest, Algocyte® profile supports Provider-defined blood test panels. Test Profiles are used to group blood analytes into various data groups of interest. Those data groups are then used to filter the test results in the Dashboard and the Reports.

To create a new Test Profile, simply click on the “Create new profile” button. Then, choose the analytes that you want to include from the list. You can select an entire group or individual items from each group.



Manage Test Profiles

Tip: expand the main groups to select individual items.