

# OBSOLETE

## User manual for the Lille Model

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Version 3, August 2024, in English

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## 1. The Evidencio platform

The Evidencio platform facilitates the creation, use, validation and implementation of medical prediction models and clinical decision support tools. This User Manual specifically relates to the Lille Model. The User Manual can also be referred to as the Instructions For Use (IFU).

Throughout this manual CE-marked content and the term medical device are used interchangeably.

## 2. Disclaimer

Evidencio provides information, models, calculators, equations, and algorithms (tools) intended for use by healthcare professionals. Some of these tools have been certified as CE-medical devices. For such CE-marked content the 'Official Legal Disclaimer for CE-marked content' applies. All other content and tools provided by Evidencio are explicitly only covered by the 'Official Legal Disclaimer for non-CE-marked content'. Both are available on the Evidencio website:

<https://www.evidencio.com/disclaimer>.

## 3. Warnings



### 3.1. Warnings for CE-marked content

Calculations alone should never dictate patient care, and are no substitute for professional judgement. This tool is only to be used by physicians in a clinical setting, and is not for patient use.

Always read the intended use before using this tool.

Always make sure the patient complies with the clinical indications and clinical contra-indications as stated on the Evidencio website, and in **paragraphs 6.3.1** and **6.3.2** of this user manual respectively.

Before reading the result, double check the filled in values to prevent errors.

Results that concern risk percentages, do not guarantee certain outcomes. When there is a risk present, do not expect an event to not occur at all, even if the risk is very small. Conversely, a high risk does not guarantee that an event will occur.

This model is only intended for use in settings where the usage and result of a model are never immediately needed.

Calculations alone should never dictate patient care, and are no substitute for professional judgement. See our full disclaimer on: <https://www.evidencio.com/disclaimer>.

The data used to perform the calculations is stored by Evidencio to enhance model function and allow issues to be traceable for further improvements. For details, see the privacy policy on our website at: <https://www.evidencio.com/privacy-policy>.

## 4. Device Description of the Lille Model

The Lille Model as provided by Evidencio allows for the calculation of the probability of 6-month mortality and likelihood of corticosteroid response in patients with severe Alcoholic Hepatitis treated with corticosteroids. For this use, the Lille Model can be regarded as the state of the art. The model is able to improve risk stratification of patients into complete, partial and null responders to corticosteroid. to classify the patient's response to corticosteroid treatment.

Using the Lille Model is recommended by multiple clinical guidelines, often at day 7 of treatment, especially in combination with models identifying severe alcoholic hepatitis such as the Model for end-stage liver disease (MELD) Score, which are often consulted earlier during treatment.

## 4.1. Lifetime, residual risks and side effects

The Lille Model is software, and does not expire. The lifetime is initially set at 5 years from certification, if the state of the art does not change in such a way as to negatively affect the benefit-risk of the device, the lifetime can be extended.

No steps are required to be undertaken by the user to decommission a product when it is taken off the market. If the lifetime is not extended, a notice will be placed on the model page on the platform. When a device is taken off the market, users may be informed about this (e.g. through e-mail).

Evidencio has identified a series of risks associated with the use of this model.

The Lille Model is a low-risk device, there are no noticeable risks involved outside of possible mis-estimation of 6-month mortality and likelihood of corticosteroid response, and all residual risks are accepted.

Most identified risks can be defined into two main groups, depending on their outcome.

- a) The risk calculation was wrong or;
- b) The MDSW prediction model is inaccessible.

A wrong risk calculation can be the result of erroneous input values or an error in the mathematical calculation. Technical risks, including the erroneous calculations or the inaccessibility due to a technical error, have been mitigated when possible. These measures focussed on reducing the risks' probability and severity. Concluding that the risks could not be mitigated further, the residual risks were classified as *low-level and acceptable*. It should be noted that the use of Evidencio's Medical Device Software is itself a risk mitigation measure, as Evidencio's certified Quality Management System ensures and monitors the reliability of the calculations performed with its certified medical devices.

The Lille Model does not have any direct side effects relevant for the patient.

## 5. Electronic Label

The electronic label of this device contains the following information:

<b>Name of the device</b>	Lille Model
<b>Manufacture information</b>	Evidencio B.V., Irenesingel 19, 7481 GJ Haaksbergen, The Netherlands
<b>LOT number</b>	V-1.0-10279.24.08.14
<b>UDI-PI number</b>	08720938015106

The electronic label can be found on the Evidencio website, see also **section I** and **Figure 5**.

The electronic label on the website further contains the option to download the **User Manual** and **Declaration of conformity** (DoC).

### 5.1. LOT number

The LOT number indicated the model version, the model identifier, and the model publication date. Publication date is indicated as YY.MM.DD.

### 5.2. UDI-PI number

Stands for Unique Device Identifier Production Identifier (UDI-PI) number is an international tool that helps users identify and find information on products. Evidencio's UDI-PIs have the following format:

(01)[UDI-DI number](8012)[versionnumber](4326)[releasedate](240)[identificationnumber]

The UDI-DI (Device Identifier) number is a unique numeric code. For each medical device of Evidencio, a unique UDI-DI is ascribed. This UDI-DI is used as an "access key" for information stored in a unique device identification database (UDID). Information on Evidencio's medical devices can be found by searching for the UDI-DI number in the following data base:

<https://gepir.gs1.org/index.php/search-by-gtin>.

## 6. Intended Purpose

### 6.1. Intended Medical Use

The Lille Model is intended to be used by professional users who are capable of operating the device and interpreting its results. It can be used to estimate the probability of 6-month mortality and likelihood of corticosteroid response in patients with severe Alcoholic Hepatitis.

The Lille Model combines *Age, Albumin, Bilirubin, Bilirubin change over 7 days*, the presence of *renal insufficiency*, and *Prothrombin time in seconds* or *International normalized ratio (INR)* to provide an estimate on the mortality and corticosteroid response in patients with severe Alcoholic Hepatitis.

The device is intended to assist medical professionals that have patients with severe Alcoholic Hepatitis. The result of the Lille Model is intended to be reviewed and interpreted by qualified medical specialists only. The device is not intended for use by patients on their own.

The Lille Model is not intended to replace clinical decision-making, it can only provide information to the user on the estimation of the 6-month mortality and corticosteroid response. The user can use this information to support clinical decision-making regarding prognosis and treatment of the patient. In practice, this typically entails the decision to continue or stop the corticosteroid treatment.

### 6.2. Clinical benefit

The Lille Model is intended to assist medical professionals with patients that have relevant and specified clinical outcome parameters. Concretely, this is achieved by estimating a risk in order to support clinical decision-making aimed at patients with severe Alcoholic Hepatitis, in order to support clinical decision-making regarding patient prognosis. Correct functioning of the Lille Model can result in these clinical benefits:

- The Lille Model can assist in risk stratification for patients;
- Risk stratification can reduce the burden of (invasive and intensive) medical procedures such as tests on patients with low risks, reducing, shortening or avoiding stays in hospitals or other care facilities;
- Risk stratification can reduce the unnecessary consumption of (scarce) medical resources, decreasing costs and increasing their availability for high-risk patients;
- Digital implementation of the algorithm underlying the Lille Model as a medical device can improve the speed and reliability of calculation. This would further increase the accuracy of the prognosis and by extent increase the chance for the above-mentioned benefits.

### 6.3. Indented target population and exclusion

The Lille Model should be used for patients with severe Alcoholic Hepatitis the Lille Model is intended to be used only for a specific group of patients, corresponding to the below indications and clinical contra-indications.

#### 6.3.1. Clinical indications

The Lille Model should be used for patients who meet the following inclusion criteria:

- Patients with a clinical diagnosis of severe Alcoholic Hepatitis (mDF  $\geq 32$  or GAHS  $\geq 9$ );
- Patients undergoing Corticosteroid therapy for seven days.

#### 6.3.2. Clinical contra-indications

The Lille Model should not be used for patients who meet one or more of the following exclusion criteria:

- Patients younger than 18 years old.

### 6.4. User profile

The Lille Model is intended to be used by Healthcare Professionals or automatically calculated through Evidencio's API. Results shall always be reviewed and interpreted by qualified medical specialists only, in the context of the patient's clinical

history and other diagnostic test results. Healthcare professionals do not require additional training prior to the use of the medical device. The device is not intended for use by patients on their own.

## 6.5. Intended use environment

The MDSW can be used as made available on the Evidencio platform in any actively supported web-browser on personal computers, mobile devices, or tablet PCs, and on the mobile app provided by Evidencio. The MDSW can also be used through Evidencio's iFrame representation as an embedded view, provided that the specific Evidencio guidelines for iFrame implementations of this MDSW are adhered to. Automated calculation of the device is enabled through Evidencio's API. The device is only intended for use in healthcare settings where the immediate application and outcomes of the device are not required.

## 6.6. Physical interaction

The MDSW is stand-alone software and does not come into contact with any bodily or other material of the patient, user or otherwise.

## 6.7. Versions of the MDSW

The version of the Lille Model concerns the initial version of MDSW of which Evidencio is the manufacturer.

## 6.8. Functioning, physical principle

The MDSW's underlying mathematical formula is logistic regression. The acquisition and processing of the data, the analyses to assemble the relevant criteria for the MDSW as well as the setup and refinement of the Lille Model are provided in the instructions for use. Entering the details for an individual in the MDSW initiates the estimation of 6-month mortality and corticosteroid response.

# 7. Result interpretation

The primary output of the Lille Model is a risk percentage for 6-month mortality rounded to one decimal. This outcome is called the Lille score.

### Conditional information

Based on this outcome patients can be stratified into different groups depending on their risk percentage combined with threshold values, which are set in the derivation paper by [Louvet et al. \(2007\)](#) and a later paper from the same group by [Mathurin et al. \(2010\)](#). Stratification is based on the notion that patients can respond to corticosteroids differently, with a low response signalling alternative patient management.

According to the study by [Louvet et al. \(2007\)](#) a Lille score **< 45%** is classified as a **Responder** and **Low-risk** and a Lille score **≥ 45%** as a **Non-responder** and **High-risk**.

According to the study by [Mathurin et al. \(2010\)](#), aimed to update Lille Model, a Lille score of **≤ 16%** is classified as a **complete responder**, a Lille score **< 16%** and **≤ 56%** is classified as a **Partial responder**, and a Lille score **> 56%** as a **Null responder**.

The model's accuracy was shown to be high. The derivation study found an AUC of  $0.85 \pm 0.04$  for the Lille Model based on a prospective validation cohort of 118 patients.

Calculations alone should never dictate patient care, and are no substitute for professional judgement. See the Evidencio website for the full disclaimer; <https://www.evidencio.com/disclaimer>.

## 8. Additional information

### 8.1. Details

<b>Model author:</b>	Evidencio
<b>Root model ID</b>	10279
<b>Version</b>	1.0
<b>Revision date</b>	2024-08-15
<b>Speciality</b>	Hepatology
<b>Model type</b>	Logistic regression
<b>MeSH terms</b>	<ul style="list-style-type: none"> <li>Alcoholic Hepatitis</li> </ul>

### 8.2. Input variables

To perform the calculations successfully, the Lille Model requires the input variables as listed in **Table 1**.

**Table 1.** Variables used as input for the Lille Model.

Name	Description	Type	Range (step size)	Units
Age	Age of the patient	Continuous	18 - 100 (1.0)	Years
Albumin day 0	Blood Albumin level	Continuous	10 - 70 (0.1)	g/L
Evolution in bilirubin	The change in bilirubin level at day 7	Continuous	0 - 800 (0.1)	μM
Renal insufficiency	Serum creatine above 115 μM (1.3 mg/dL) or creatinine clearance of less than 40 mL/min	Categorical	No	-
		Categorical	Yes	-
Bilirubin day 0	Bilirubin levels at day 0	Continuous	20 - 1300 (0.1)	μM
Clotting time measurement	Select which type of clotting time data is available or preferred	Categorical	Prothrombin time in second	-
		Categorical	International Normalized Ratio (INR)	-
When selecting <b>Prothrombin time in seconds</b> in the variable <b>Clotting time measurement</b>				
Prothrombin time		Continuous	0 - 100 (0.1)	Seconds
When selecting <b>International Normalized Ratio (INR)</b> in the variable <b>Clotting time measurement</b>				
INR	International Normalized Ratio	Continuous	0 - 20 (0.1)	-

## 8.3. Study characteristics

The derivation paper from [Louvet \*et al.\* \(2007\)](#) describes the development of the model. They described their methods as follows;

### "Inclusion Criteria and Corticosteroid Protocol

All patients with a DF  $\geq 32$  or encephalopathy at admission were treated by corticosteroids if they fulfilled the following criteria: (1) a history of alcoholism; (2) liver chemistry suggestive of AH; (3) the absence of uncontrolled infection or recent gastrointestinal hemorrhage (<15 days); (4) transjugular liver biopsy, which was carried out for all patients. Histological diagnosis of AH was based on the presence of hepatocellular necrosis and infiltration of polymorphonuclear leukocytes. We excluded patients with active peptic ulcers, neoplasms, positive test for hepatitis B surface antigen, and human immunodeficiency virus antibodies. Patients were treated in all centers using the same treatment protocol. Prednisolone was given in a single dose of 40 mg each morning for 28 days. Patients unable to take oral medication received intravenous infusions of 32 mg methylprednisolone. In the validating cohort, only patients with a DF  $\geq 32$  were treated.

### Exploratory Cohort of Severe AH

For development of the model, 320 patients were included from July 1990 to October 2001 in Beaujon, Beclere, and Saint-Antoine Hospitals and from October 2001 to October 2003 in the Lille Hospital.

### Validating Cohort of Severe AH

We validated the performance of the Lille model in an independent prospective cohort of patients hospitalized in Lille and Bethune Hospitals for severe AH treated by corticosteroids. Validation and comparison of models were performed prospectively from November 2003 to April 2005 in all patients (n =118) admitted. International normalized ratio (INR) was measured in this validating cohort to compare the Lille model with the MELD score calculated using the formula described by Dunn *et al.*"

The model was adapted by Evidencio by following the equations as described in the derivation paper followed by an internal verification of its performance.

In **Table 2** and **Table 3** information on the characteristics of the patient data used to derive and validate the model is provided.

**Table 2.** This table contains information on the patient group data used to derive and validate the model.

Name	Lower Limit	Median	Upper Limit	Unit
Age	28.2	49.7	78	years
Bilirubin	32	210	877	$\mu\text{mol/L}$
Prothrombin time	13.5	19.5	32	seconds
Albumin	11	27	49	g/L
Serum creatinine	0.32	0.8	6.7	mg/dL
AST	15	95	504	IU/L
white blood cells	2200	10800	64000	no/mm <sup>3</sup>
Daily Alcohol intake	30	120	400	g/day
Evolution of Bilirubin between day 0 and day 7	355	32.2	403	$\mu\text{mol/L}$
Child-Pugh Score	7	10	15	points
Maddrey Function	23.2	47.5	144.6	-

**Table 3.** This table contains categorical characteristics on the patient group data used to derive and validate the model.

Name	Subset / Group	Nr. of patients
Presence of ascites	Yes	203
Presence of ascites	No	55
Presence of ascites	Unknown	37
Encephalopathy	Yes	78
Encephalopathy	No	217



## 8.4. Supporting publication & Related files

Several relevant studies, such as the original derivation study by [Louvet et al. \(2007\)](#) are contained in **Table 4**. These publications have tags to identify their link with the model. Examples of relevant tags are; "Peer review", "Internal validation", "External validation", and "TRIPOD". Publications that have the tags: "Internal validation" or "External validation", contain data on the performance characteristics of the device.

**Table 4.** Overview of selection of supporting publications & Related files.

Derivation study Lille Model  Original calculator	<b>The Lille model: A new tool for therapeutic strategy in patients with severe alcoholic hepatitis treated with steroids (2007)</b> <i><a href="#">Alexandre Louvet</a>, <a href="#">Sylvie Naveau</a>, <a href="#">Marcelle Abdelnour</a>, <a href="#">Marie-José Ramond</a>, <a href="#">Emmanuel Diaz</a>, <a href="#">Laetitia Fartoux</a>, <a href="#">Sébastien Dharancy</a>, <a href="#">Frédéric Texier</a>, <a href="#">Antoine Hollebecque</a>, <a href="#">Lawrence Serfaty</a>, <a href="#">Emmanuel Boleslawski</a>, <a href="#">Pierre Deltenre</a>, <a href="#">Valérie Canva</a>, <a href="#">François-René Ruvot</a>, <a href="#">Philippe Mathurin</a></i>  DOI: <a href="https://doi.org/10.1002/hep.21607">10.1002/hep.21607</a>
Lille model update study	<b>Corticosteroids improve short-term survival in patients with severe alcoholic hepatitis: meta-analysis of individual patient data (2010)</b> <i><a href="#">Philippe Mathurin</a>, <a href="#">John O'Grady</a>, <a href="#">Robert L Carithers</a>, <a href="#">Martin Phillips</a>, <a href="#">Alexandre Louvet</a>, <a href="#">Charles L Mendenhall</a>, <a href="#">Marie-José Ramond</a>, <a href="#">Sylvie Naveau</a>, <a href="#">Willis C Maddrey</a>, <a href="#">Timothy R Morgan</a></i>  DOI: <a href="https://doi.org/10.1136/gut.2010.224097">10.1136/gut.2010.224097</a>

## 8.5. Release notes

The release notes for each publicly available version of the device can be found on the Evidencio website page for the Lille Model: <https://www.evidencio.com/models/show/10279>, selecting the correct device, and clicking on Release Notes. It is recommended to read these notes after a version update to see if these changes are relevant to you. Please make sure the correct model version is selected.

## 9. Implementation of the model through an API

The Lille Model can be used through Evidencio's API to allow for (automated) calculation of the 6-month mortality and likelihood of corticosteroid response. In the case of use of the MDSW through the API, the user should take into account the different inputs for the model, in order to properly interpret the results. Furthermore, the information contained within this user manual, specifically chapters 3-8, should be read and understood by the user.

Instructions on how to implement the API within a system are included in a separate document that is made available to the party performing the technical implementation.

When using the MDSW through the API, the warnings and descriptions given in this document all apply, as does the additional information. The information for use included in this document regards both use through the website as well as use through the API, as long as the API is properly implemented. The API is only intended for authorized users.

## 10. Using the model on the Evidencio website

Using the tool on the Evidencio website requires a stable internet connection. The tool was tested on the following browsers and will run on these versions and higher;

- Personal computers or laptops using the following browsers:
  - Safari (version 17.5 and higher)
  - Chrome (version 126.0.6478.127 and higher)
  - Firefox (version 128.0 and higher)
  - Edge (version 126.0.2592.102 and higher)
- Tablets or smartphones running on the next operating systems:
  - IOS (version 17.5.1 and higher)
  - Android (version 13 and higher)

Correct functioning of the tool with earlier versions of these browsers cannot be guaranteed.

The medical device cannot be used in combination with Internet Explorer. The personal computers, laptops, tablets or smartphones used should at least be able to have an internet connection and use the browsers mentioned above. The minimal screen resolution should be 800x600.

Furthermore, the model may be used through the Evidencio iFrame representation of the calculator, as an embedded view, provided that the specific Evidencio guidelines for iFrame implementations of that model are adhered to.

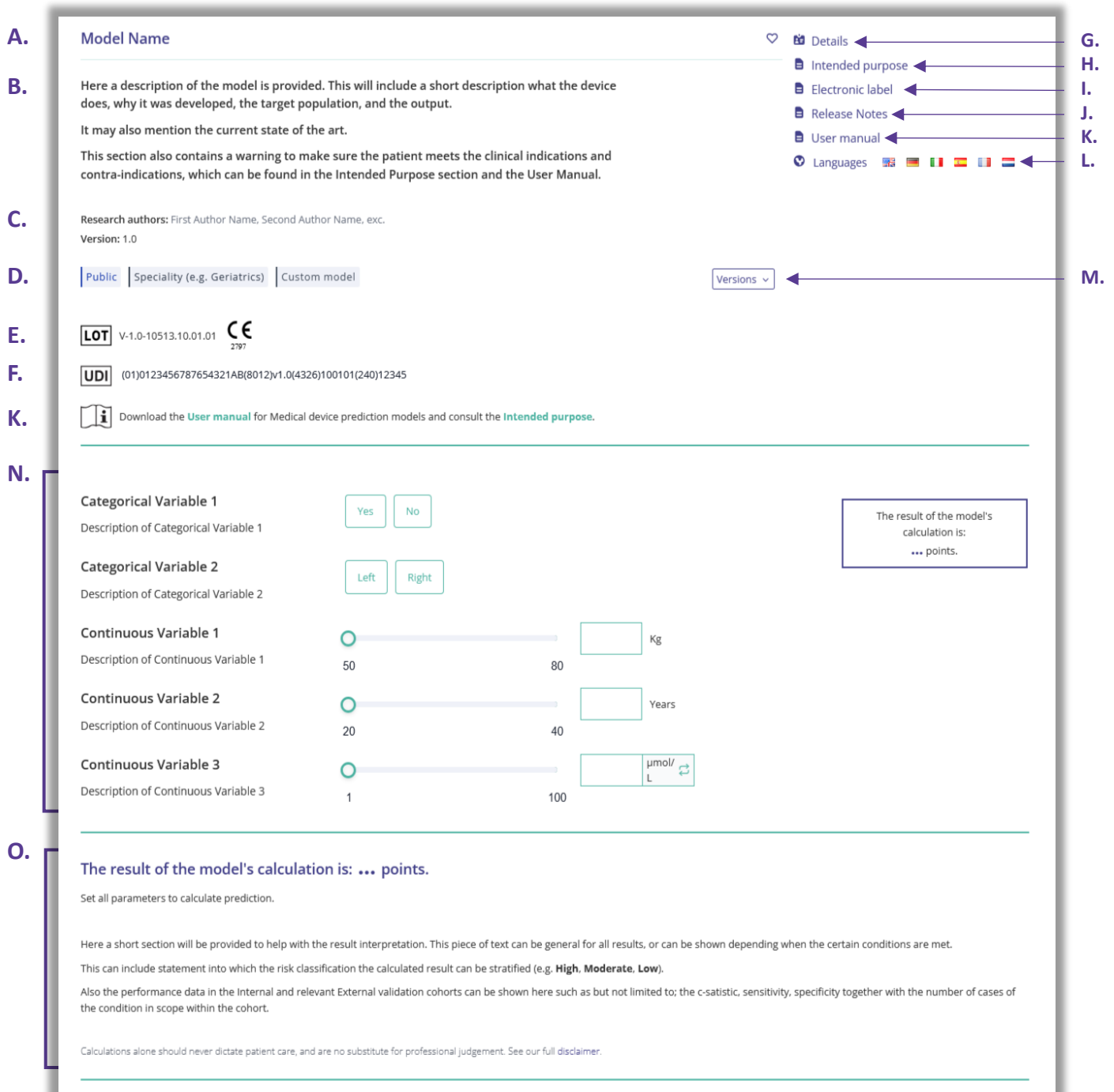
The Evidencio MDSW models can be used with any browser settings that don't distort the regular display of websites, with a 50% to 500% zoom rate, and at a display resolution starting from 800x600. However, factory recommended browser settings, 100% zoom rate and regular display resolution are recommended.

The MDSW is intended for authorised users only, and should not be used by unauthorised personnel.

This model is only intended for use in settings where the usage and result of a model are never immediately needed.

## 10.1. General modelling landing page

The medical device model on the Evidencio platform is shown in **Figure 1**. The model landing page contains the following sections, that are indicated in **Figure 1**.



The screenshot displays the Evidencio model landing page with various sections and interactive elements. Annotations A through M point to specific features:

- A.** Model Name
- B.** Description of the model, including a short description, target population, and output. It also mentions a warning about clinical indications and contra-indications.
- C.** Research authors and Version information.
- D.** Public, Speciality (e.g. Geriatrics), and Custom model tabs.
- E.** LOT (V-1.0-10513.10.01.01) and CE mark.
- F.** UDI (01)0123456787654321AB(8012)1.0(4326)100101(240)12345
- K.** Download the User manual for Medical device prediction models and consult the Intended purpose.
- N.** Input section for Categorical and Continuous variables.
  - Categorical Variable 1:** Yes/No buttons.
  - Categorical Variable 2:** Left/Right buttons.
  - Continuous Variable 1:** Slider from 50 to 80, unit Kg.
  - Continuous Variable 2:** Slider from 20 to 40, unit Years.
  - Continuous Variable 3:** Slider from 1 to 100, unit  $\mu\text{mol/L}$ .
- O.** The result of the model's calculation is: ... points.
- G.** Details
- H.** Intended purpose
- I.** Electronic label
- J.** Release Notes
- K.** User manual
- L.** Languages
- M.** Versions

**Figure 1.** Example of a model landing page on the Evidencio website.

## A. Model title

This is the title and name of the model

## B. Model description

This is a short description of the model.

## C. Research Authors

These are the research authors of the paper that originally published the model.

## D. Model tags

These are the tags that are assigned to the model. Evidencio has the following status tags: "Draft", "Public", "Private", "Under review". Evidencio has the following model type tags: "Composite model", "Sequential model", "API model". Evidencio has the following calculation method tags: "Linear model", "Logistic regression", "Cox regression", "RScript" and "Custom model". Next to this, there are tags that indicate the specialty e.g. "Cardiology".

## E. LOT number

The LOT number indicated the model version, the model identifier, and the model publication date. Publication date is indicated as YY.MM.DD.

Additionally, the CE mark is displayed next to the LOT number. This way, medical devices can be easily recognized.

## F. UDI-PI Number




For information on the UDI-PI Number see **Section 5.2** on **page 4** of this user manual.

## G. Details button

On the top right of the model page, several clickable buttons are displayed that show a pop-up when clicked. The first button opens a pop-up concerning additional information about the model. This pop-up has three sections: Details, Study characteristics and Supporting publications & related files.

### Details

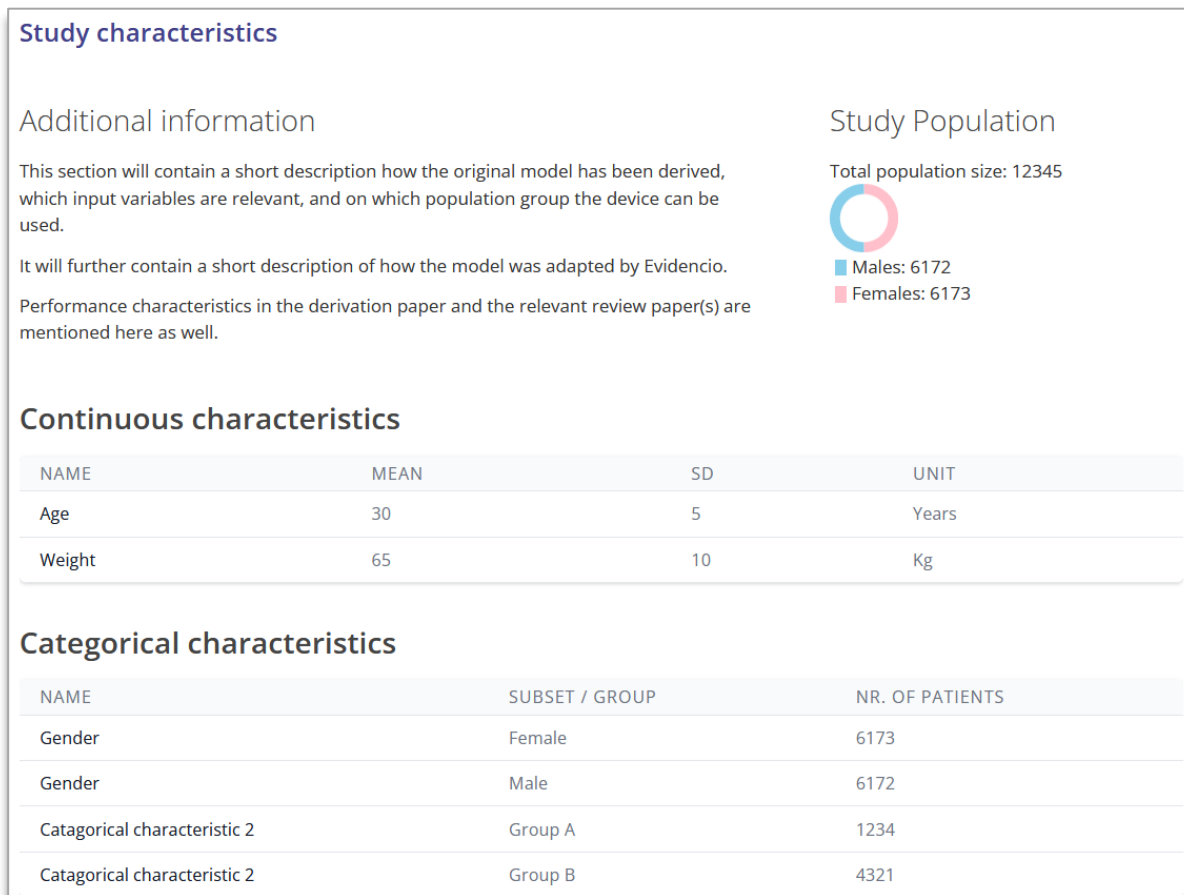
The first part of the additional information concerns the details of the model as shown in **Figure 2**. This section may show the calculation if it is built as a mathematical formula and, if applicable, shows the conditions at which certain formulas are used.

Details		
Model author	Evidencio	Status   Draft
Model ID	10513	Share   
Version	1.0	
Revision date	2024-07-15	
Specialty	Cardiology , Geriatrics , Vascular medicine	
Model type	Custom model (Conditional)	
MeSH terms	<ul style="list-style-type: none"> <li>• Term #1 (e.g. Heart Failure)</li> <li>• Term #2 (e.g. Diabetes Mellitus)</li> <li>• Term #3 (e.g. Elderly)</li> </ul>	
Condition		Formula
Categorical Variable 1=Yes		$\text{Categorical Variable 1} + \text{Categorical Variable 2}^2 + \frac{3 \cdot \text{Continuous Variable 1}}{\text{Continuous Variable 2}}$
Categorical Variable 1=No		$\sqrt{\text{Continuous Variable 1}} + \frac{2 \cdot \text{Continuous Variable 2}}{\text{Continuous Variable 3}}$

**Figure 2.** Example of first part of detail section.

## Study Characteristics

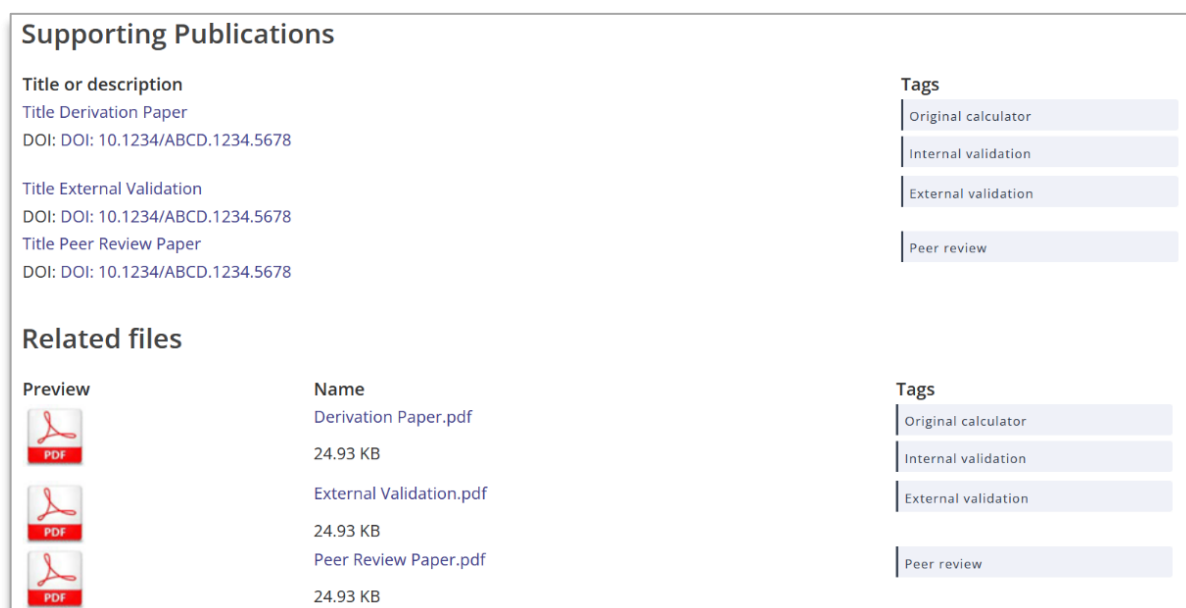
Below the 'Details section' the section labelled 'Study characteristics' provides information on the characteristics of the patient data used to derive and validate the model. Additional information is provided on the methods used to develop and/or validate the model. An example of the Study characteristics section can be seen in **Figure 3**.



**Figure 3.** Example of the study characteristics section under the Details tab.

## Supporting publications & Related files

An important part of the Study characteristics is the information on Supporting publications and related files. These sections can be found at the bottom of the Details-pop-up as shown in **Figure 4**.



**Figure 4.** Example of the Supporting publication & Related files section under the Details tab.

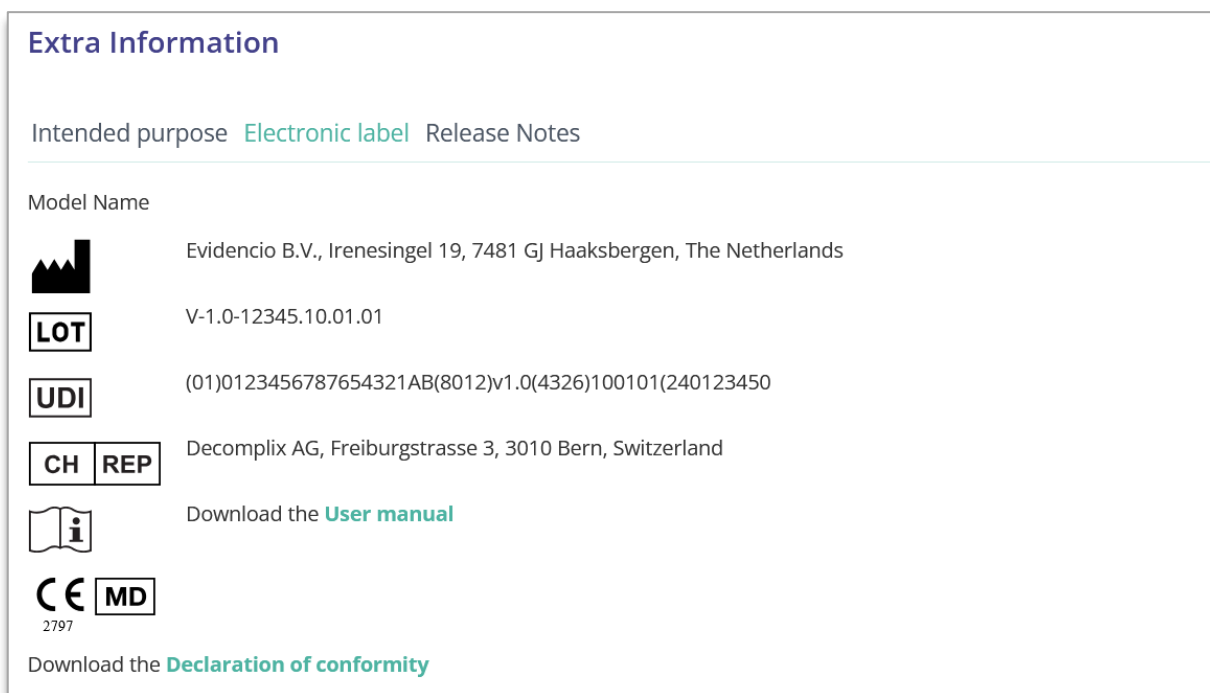
Tags are attached to the different files to identify their link with the model. Examples of relevant tags are a.o.; “Peer review”, “Internal validation”, “External validation”, and “TRIPOD”. Publications that have the tags: “Internal validation” or “External validation”, contain the performance characteristics of the device. Figures and tables which help to interpreted the results may also be provided here.

## H. Intended purpose

Under this tab, the intended purpose can be found, containing a lot of information regarding the model, its user, target population, clinical benefit, etc. This information is also provided in this manual and can be found in **Chapter 5** on **page 4**.

## I. Electronic label

The electronic label button opens a pop-up with the location and address of Evidencio, the LOT number, the UDI number, the CE-mark, the medical device logo and a download link for the declaration of conformity of the medical device. The example of the electronic label is shown in **Figure 5**.



**Figure 5.** Example of an electronic label under the Electronic Label tab.

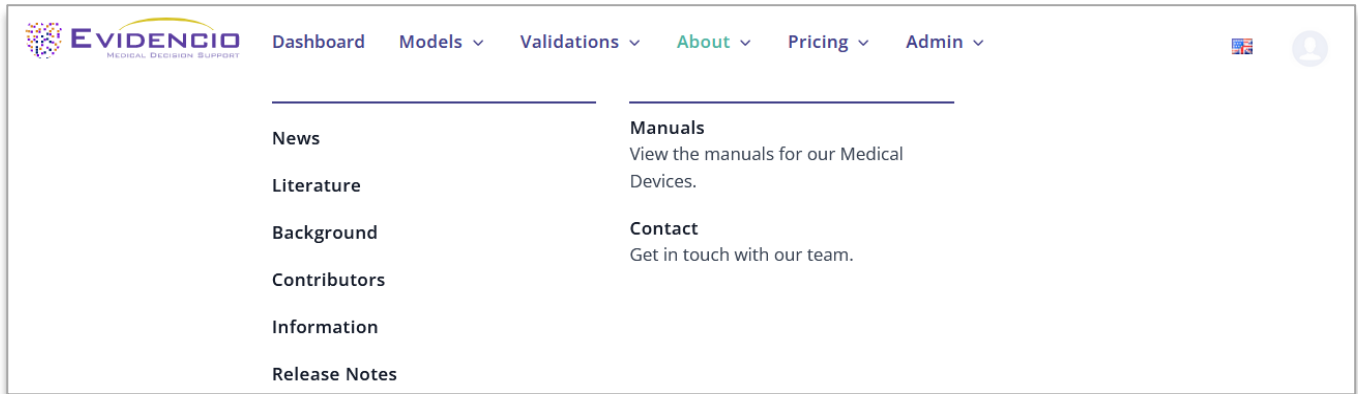
## J. Release notes

Under this tab the most recent release notes can be found, noting the most significant changes between the versions of the model found on the Evidencio website.

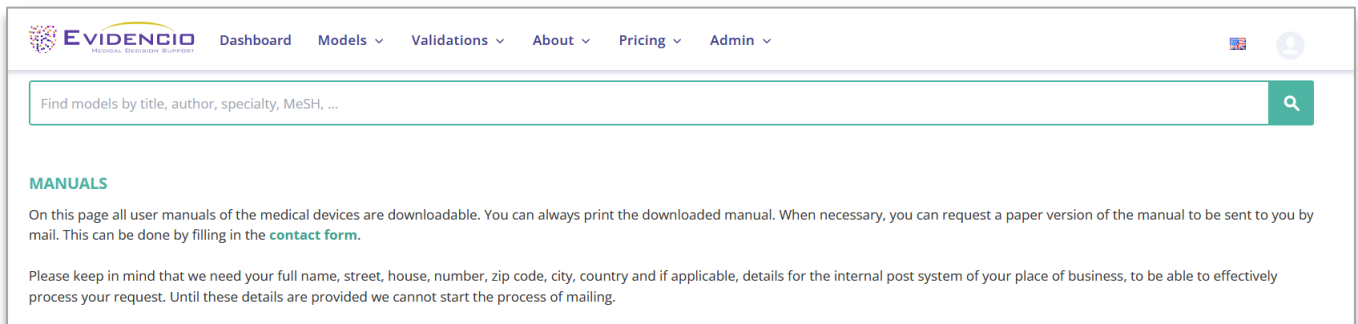
The ‘Release Notes’ button opens a pop-up with the latest release notes of the model. Here you can find a list of the most significant changes over the different versions of the model. Additionally, if there are any known residual anomalies the user should be aware of, they are listed here. It is recommended to read these notes after a version update to see if these changes are relevant to you.

## K. User manual

This user manual can be found in three places: 1) under the short description of the model on the Evidencio model page, 2) on the right of the model page, and 3) as a tab in the electronic label screen. Additionally, all versions of the user manual can be found in the general page for all user manuals for medical devices. The page can be found under the ‘About’ drop-down menu button as shown in **Figure 6**. The user manual page is shown in **Figure 7**. This version of the manual can be printed if required. If necessary, a paper version of the manual can be requested to be sent to you by mail. Evidencio’s contact details are listed in **Chapter 11** of this user manual.



**Figure 6.** The drop-down menu where the user manual page can be found.



**Figure 7.** The user manual page for all user manuals.

## L. Languages

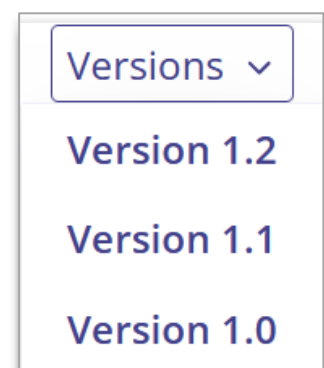
Here an overview of languages in which the Lille Model is available is provided, any of which can be selected by clicking on the corresponding flag icon. The standard language on the Evidencio website is English. When other languages are available, these can be selected here. The list of languages may be different between models and may change when in time more languages will become available.

Please note that, if a language is selected, only the user interface of the specific model will be translated, other general features and information on the site might still be set to one of our primary languages English, German, and Dutch.

When you find mistranslations, irregularities, or confusing or ambiguous use of language in English or any other language on the Evidencio website or in one of our manuals, please do not hesitate to contact us using the contact information provided at the end of this manual.

## M. Version selection

If available, clicking on the Version tab allows the user to select a different version of the Lille Model for a list as displayed in **Figure 8**. Please note that the model currently selected is not presented in the dropdown menu.



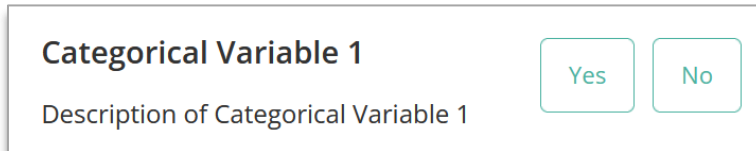
**Figure 8.** Example of version selection tab.

## N. Input section

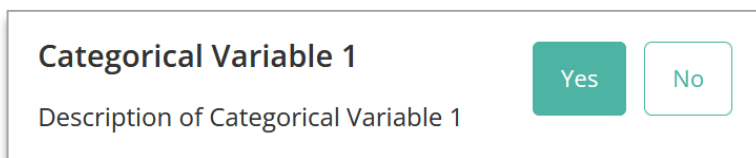
The Evidencio platform allows two separate input variables; categorical variables and continuous variables.

### Categorical variables

In the example shown in shown in **Figure 9** and **Figure 10**, the example **Categorical Variable 1** concerns a categorical variable. The input that is wished to be used can be entered by clicking on either button. The selected button changes to green, as seen in **Figure 10**.



**Figure 9.** Example of a categorical variable, no button has been clicked and thus no input has been provided by the user.



**Figure 10.** Example of a categorical variable, where the "Yes" button has been clicked.

### Continuous variables

In the example shown in **Figure 11**, the **Continuous Variable 3**, exemplifies a continuous variable. The plausible ranges for which the model is tested and deemed valid are used.

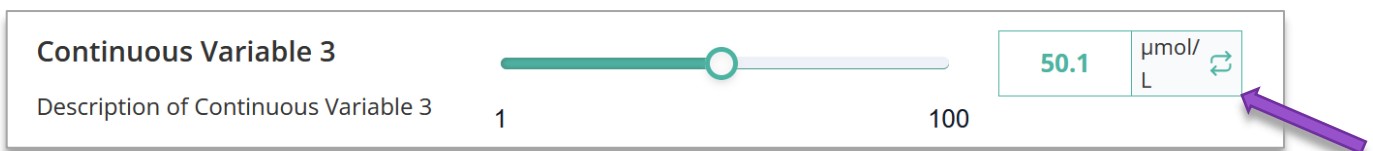
The details for a patient can be entered by sliding the button to the correct value, or by entering the correct value in the box on the right-hand side (i.e., where the 10.2 mg/dL is entered for the **Continuous Variable 3**).



**Figure 11.** Example of a continuous variable, where "10.2 mg/dL" has been entered.

### Unit conversion

Sometimes it is possible to use a unit conversion, by clicking on the unit when the green arrows are present. See **Figure 12** below where the unit has been clicked and switched.



**Figure 12.** Example of a continuous variable where "50.1 μmol/L" has been entered.

### Details on variable measurements

Directly underneath the name for each variable, additional details can be provided on the methods required to enter the correct value for each variable. Details may include but are not limited to; more detailed explanation of the variable, the ranges of the variables (for healthy individuals), or a description when a continuous variable should be true or false.



## O. Result section

At the bottom of the page, the results of the model are shown.

Calculations alone should never dictate patient care, and are no substitute for professional judgement. See our full disclaimer on: <https://www.evidencio.com/disclaimer>.

### Result calculation

When all variables are filled in, a result will be calculated. No result is displayed until all variables are filled in and the result section will indicate; *"Set all parameters to calculate prediction."*

### Result interpretation

In the result interpretation, a risk stratification is provided based on the calculated result. Additional information about this stratification and the classification as found in the derivation and important validation cohorts may also be provided. An example of the information is shown in **Figure 13**.

**The result of the model's calculation is: ... points.**

Set all parameters to calculate prediction.

Here a short section will be provided to help with the result interpretation. This piece of text can be general for all results, or can be shown depending when the certain conditions are met.

This can include statement into which the risk classification the calculated result can be stratified (e.g. **High, Moderate, Low**).

Also the performance data in the Internal and relevant External validation cohorts can be shown here such as but not limited to; the c-statistic, sensitivity, specificity together with the number of cases of the condition in scope within the cohort.

**Figure 13.** Example of the result display and information section.

## 11. Manufacturer details

Any serious incident that has occurred in relation to the device should be reported to the manufacturer and the competent authority of the country in which you, the reader, are established. A competent authority is the institute that governs all issues related to medical devices in a country.

Please contact Evidencio when you suspect any malfunction or changes in the performance of a medical device. Do not use the device, until Evidencio replies to your message that it is safe to start using it again.

Contact details of Evidencio:



Evidencio B.V., Irenesingel 19, 7481 GJ Haaksbergen, The Netherlands  
[www.evidencio.com](http://www.evidencio.com)  
tel: +31 53 85195 08  
e-mail: [info@evidencio.com](mailto:info@evidencio.com)