

Instructions for use

PEDeDose

Clinical Decision Support Tool for

Drug Dosages in Pediatrics for Healthcare

Professionals

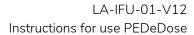


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1. General

The product PEDeDose is intended to support healthcare professionals in prescribing pediatric medication by providing evidence-based patient-specific dosage information based on children's body weight, age, and body size, if relevant. Individual dosage recommendations can be calculated by using the integrated calculator. Dosage information is maintained in a data base which is part of the product.

The product is not intended to replace the healthcare professional's decision on the choice and the dosage of the medication, but rather to support the healthcare professional in his or her decision by providing evidence-based and individualised data.

PEDeDose provides pediatric dosage information in three languages (German, French, English). Dosages are displayed via a search for substance, product (mainly products that are on the Swiss market), indication or ATC code. The information provided by PEDeDose (e.g. indications, dosages, "General Remarks") can be either "on label" or "off label" use concerning the relevant medication. When assessing whether it is an "on label use" or an "off label use", healthcare professionals must consult the product information. The final decision to use a medication "off label" remains with the attending healthcare professional. PEDeDose is available for healthcare professionals in European countries. For the Swiss market, additional (non-exhaustive) information (such as the preparation of the medication or application) of certain individual products is provided in German and French.

PEDeDose database does not claim to be exhaustive.

The latest version of the instructions for use is available at www.pededose.ch. It is the responsibility of the user to always have a printed, up-to-date version of the instructions for use.

1.1Copyright

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In the instructions for use PEDeus AG is referred to as PEDeus.



1.2Accessibility

PEDeDose is intended for use by healthcare professionals. The access to the product is restricted by state-of-the-art login solutions (see 1.3).

Usually, PEDeDose is accessible 24 hours a day/365 days a year (unforeseen circumstances and 10 minutes every two months for system updates reserved). It can only be used by registered users. Access can be gained via direct registration at PEDeDose (via e-mail address) or in Switzerland via swiss-rx-login.

An access via IP address or a local installation may be used. Contact PEDeus for further information.

1.3 Login

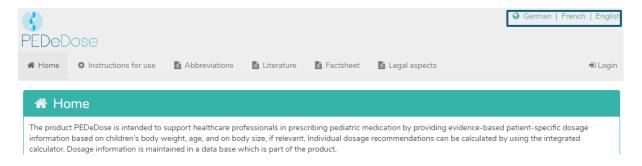
There are three different login processes: PEDeDose login, swiss-rx-login and IP-address login. With the PEDeDose and swiss-rx-login, the user must register upon first login and fill out a form about personal details. When logging in via the IP address, an institution receives direct access to the PEDeDose application for all end devices that use this IP address.

At PEDeDose the login via swiss-rx-login is limited to the user type "licensed academic professionals" on the basis of the personal data in accordance with the medical profession register of the Federal Office of Public Health (Switzerland).

1.4Language

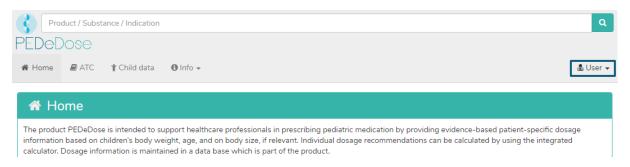
PEDeDose is available in German, French and English.

The language is selected on the top right of the home screen, see below:

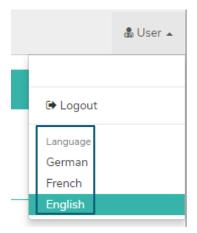


After logging in, the language can be selected by clicking on the "User" button, see below:





The desired language is selected from the drop-down menu, see below:



1.5Technical information and requirements

Minimum system requirements are 320 pixels (screen width) and 480 pixels (screen height). Switching to the mobile view takes place at less than 768 pixels. PEDeDose is designed for use on PCs, tablets and mobile phones (responsive design).

It is advisable for users to install an anti-virus software on their system.

PEDeDose runs on the most common internet browsers (e.g. Chrome, Explorer, Safari, etc., in the respective most current versions).

The login remains active for one month if the user selects "Save Login" after registering and the browser does not automatically delete cookies after logging out. This does not apply to swiss-rx-login.

The local installation and the external website are distinguishable due to different URL addresses.

If local installation is chosen, the reliability of the user's IT infrastructure must be permanently ensured, and the responsibilities/permissions of the local user are to be bilaterally defined.

The PEDeDose local installation serves in particular to ensure a high availability of the dosage data and the calculator, as it gives independence from a permanent internet connection.

These instructions for use apply for PEDeDose versions from 2.3.2 to 2.3.99 or until a newer version is published. It replaces the previous version.



1.6Intended purpose

The product PEDeDose, which includes the software module PEDeDose, supports healthcare professionals in the field of pediatric medication by providing evidence-based, patient-specific dosage recommendations based on children's body weight, age, and on body size, if applicable.. Individual dosage recommendations can be calculated with the integrated calculator. The data for the dosage recommendations are maintained in a database, which is part of the module.

PEDeDose is not intended to control automated clinical processes. The final decision about the medication lies with the treating physician.

1.7Usage specification

1.7.1 **Medical indication**

PEDeDose provides information on pediatric dosages and individual dosage recommendations for different pediatric indications.

1.7.2 Patient target groups

PEDeDose is used in conjunction with pediatric patients, including newborns (term and preterm), infants, toddlers, children and adolescents.

No restrictions are defined with regard to the health status of patients.

1.7.3 Intended user

a) End users

PEDeDose is intended exclusively for use by healthcare professionals (medical or pharmaceutical professionals, e.g. doctors, nurses, pharmacists).

b) System integrators

PEDeDose can be integrated by software developers into systems such as hospital information systems.

c) Operators

The administration of the PEDeDose data is exclusively carried out by the operators (PEDeus employees) who are medical or pharmaceutical professionals.

1.7.4 User environment

PEDeDose is used either independently (standalone, website) or integrated into a primary system, such as a hospital information system.



The intended users have access to PEDeDose from different environments, including access from clinics/hospitals, ambulances, doctors' offices, pharmacies and from home.

1.7.5 Contraindications

Not applicable

1.7.6 Warnings, precautions and/or measures

Not applicable

1.7.7 Training

No specific training is necessary for the use of PEDeDose. Users are obliged to use PEDeDose in accordance with the instructions for use, which can be consulted at any time.

1.8 Residual risks

The following residual risks must be considered by the user:

- If a user enters incorrect data or (unintended) data is entered in PEDeDose by another person without the user's knowledge, the received output might be incorrect.
- It might happen that PEDeDose is temporarily unavailable or partially unavailable, or the update will be installed with some delay.
- The user may miss alerts for various reasons (e.g. work flow interruption, distraction).
- The information and data may not be fully visible on some (small) screens.
- As the system is based on IT technologies, performance may be affected by cybercrime.

2. Dosages

There is limited availability of clinical studies regarding dosages in children. The dosages displayed were carefully reviewed based on available literature and common practice of physicians at the University Children's Hospital Zurich or other children's hospitals/children's clinics. For better assessment of the dosages' accuracy, grades of recommendation (A-D) are displayed right next to the dosages (see section 0).

However, those dosages do not consider individual characteristics such as any limited organ functions (kidney and liver insufficiency), drug interactions, obesity or genetic polymorphism. Due to advances in science and new findings, the data contained in PEDeDose is subject to continuous updating and improvement.



2.1Age and weight

Each dosage in PEDeDose is coupled to age and/or weight. The following table with examples explains how age and weight is to be interpreted.

| Symbol/age or weight | Explanation |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| < x | Below age/weight x |
| ≥ X | Above or equal age/weight x |
| a – b | From age/weight a (age/weight a is included) to age/weight b (age/weight b is not included) |
| 10 D – 6 M | From 10 days to 6 months minus 1 day |
| 6 M – 12 Y | From 6 months and 0 days to 11 years and 364 days |
| ≥ 12 Y | From the 12 th birthday |
| 1 D – 28 D | From day 1 up to and including 27 days (preterm infants not included) |
| < 28 D | From age 0 up to and including 27 days (preterm infants included, up to 43 6/7 weeks of postmenstrual age (PMA) for preterm infants (PI)) |
| 32 W (PMA) – 36 W (PMA) | From week 32 and 0 days of postmenstrual age up to and including 35 weeks and 6 days of postmenstrual age |
| ≤ 50 kg | Weight under or equal to 50 kg |
| 5 – 40 kg | From 5.00 to 39.99 kg |



A dosage can be valid for an "age", "age AND weight", "age OR weight" or "weight", see the following table.

| Symbol/age or weight | Explanation |
|------------------------|----------------------------------------------------------------------------------------|
| 1 Y - 18 Y | Valid for the age range 1 year to 17 years and 364 days; the weight is of no relevance |
| 1 Y – 18 Y and < 50 kg | Valid for the age range 1 year to 17 years and 364 days AND a weight under 50 kg |
| 1 Y – 18 Y or < 50 kg | Valid for the age range 1 year to 17 years and 364 days OR a weight under 50 kg |
| ≥ 50 kg | Valid for a weight above or equal to 50 kg; the age is of no relevance |
| 5 – 40 kg | Valid for the range 5.00 kg to 39.99 kg; the age is of no relevance |

2.2 Repetitions

The number of daily repetitions refers to the number of doses over 24 hours in equally large time intervals. The following table shows with some examples how the number of repetitions [Number of repetitions] is to be interpreted:

| Number of repetitions | Time interval |
|-----------------------|---------------------------------|
| 1 x daily | one dose every 24 h |
| 2 x daily | one dose every 12 h |
| 3 -4 x daily | one dose every 6 h to every 8 h |
| 6 x daily | one dose every 4 h |



2.3 Maximum dosage

In the database, maximum individual and/or daily dosages are indicated to some extent. The interpretation of maximum dosages is difficult with children. If the main dosage is given per kg body weight, whereas the maximum dosage is given as a fixed dosage without reference to body weight, this maximum dosage must be interpreted as follows: The main dosage is valid up to the body weight ("limit") where the maximum dosage is reached. If the child weighs less than this "limit", the maximum dosage must not be applied. If the child weighs more, it will no longer be dosed per kg of body weight, but the maximum dosage is applied.

The following is an example of the explanations above:

| Substance | Age | Dosage | Max. individual dose |
|-----------|-------------------------|---------------|----------------------|
| X | 28 D – 18 Y and < 50 kg | 10 mg/kg/dose | 400 mg/dose |

If a child weighs <40 kg, the maximum individual dose must \underline{not} be administered, but the dosage must be calculated using the formula 'body weight in kg x dosage in mg/kg/dose'. For a child weighing 20 kg, this results in a dosage of 200 mg/dose.

If a child weighs \geq 40kg, the maximum individual dose of 400mg/dose is administered (40 kg x 10 mg/kg/dose). For children weighing more than 40kg, no calculation takes place any more, as the maximum single dose has been reached and must not be exceeded.

The calculator in PEDeDose considers maximum dosages in the calculations.



2.4 Grade of recommendation

The grade of recommendation refers to the main dosage, not to maximum individual or daily dosage. The classification is divided into four different grades, from A to D. Should there be multiple references, the grade of recommendation refers to the reference with the highest grade.

| Grade of recommendation | Explanation |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Α | Systematic review of randomised controlled trial (RCT); well-planned, single randomised controlled study; all-or-nothing principle, (approval by the Swiss authorities since 01/01/2011) |
| (A) | Systematic review of randomised controlled trial (RCT); well-planned, single randomised controlled study; all-or-nothing principle, (approval by the Swiss authorities before 2011) |
| В | Systematic review of well-planned cohorts; well-planned single cohorts (and RCT with modest follow-up); outcome-research study; systematic review of case-control-studies; single case-control study |
| С | Case series; bad cohorts and case-control studies |
| D | Expert's opinion without explicit clinical assessment; physiological models; comparisons; principles; "eminence-based-medicine" |

If a dosage specification is not within the literature dosage, but a partial aspect is deviating, the grade of recommendation is lowered by one level.



3. Calculation

If the user runs the PEDeDose version without calculator, this section will not apply.

3.1Dose calculation

The PEDeDose website allows the calculation of doses for a child after entering date of birth, body weight and - if necessary - height. With preterm infants, also the gestational age at birth is entered. At dosages that relate to the body surface of a child, the body surface is estimated based on the Mosteller formula. A few data sets do not permit dosage calculation. In this case, a corresponding warning message is displayed.

A No individual dose is calculated for this (these) dosing line(s).

3.2Child data: calculation basis

The following values are allowed for the weight and height of the child (see table below):

| | Minimum | Maximum |
|-------------|---------|---------|
| Weight [kg] | 0.25 | 200 |
| Height [cm] | 20 | 250 |

If a value outside the limits is entered, an error message is displayed.

Child data entries are checked for plausibility based on percentile curves^{1, 2} (weight and height). A warning is shown in case of weight and/or height below the 1st or above the 99th percentile. In preterm infants, a warning is shown in case of weight and/or height below the 3rd or above the 97th percentile.

The dosage in obese children is complex; various factors/criteria have to be considered. For this reason, PEDeDose allows the calculation of the BMI, which gives the user an indication of whether he needs to further clarify the dosage. Entering weight and height permits the calculator to calculate the child's BMI, which will be displayed below the calculated dosage. Please consult the factsheet "Drug dosing in overweight children" (www.pededose.ch, "Info").

Child data is saved for as long as the user is logged in. If the user logs out or closes the browser, the child data is deleted.

¹ Braegger C et al. New Swiss growth charts. Paediatrica 2011; 22(1): 9-11.

² Pädiatrie Schweiz. Recommendation regarding the request to adapt the current Swiss growth charts. October 2020. Online access 08/2021.



3.3 Calculation of preterm infant doses

In preterm infants, the gestational age at birth (weeks and days) must be additionally entered with the child data.

Preterm infants are born prior to the completed 37th week of pregnancy. For dosage calculation, they remain preterm infants until the postmenstrual age of week 39 and 6 days is reached. They change into neonatal age for dosage calculation from gestational week 40 and 0 days. After that, the corrected age applies. The calculation according to corrected age is maintained until the end of the 36th month (chronological age), then the dosage is calculated based on chronological age.

An exception to this rule are active vaccines; these are calculated and displayed according to the chronological age.



4. Web service

This part of the instructions for use is for users of the web service. The web service provides access to PEDeDose via integration in a clinical information system, in a medical practice or pharmacy software. The web service allows the user to either calculate a dosage after entering the substance or product or to check a self-selected dosage.

The user of the web service is responsible for the timeliness of the entered child data. All alerts and warnings provided by PEDeDose must be displayed to the user in the clinical information system, in a medical practice or pharmacy software. PEDeDose is integrated via web service.

4.1Dose check

The web service allows the user to check a self-selected dosage and indicates the deviation from the calculated dosage in percent. If the defined, active substance-dependent tolerance - classified according to drugs with broad or narrow therapeutic index - is exceeded or not reached by the deviation between the self-selected and the calculated dosage, the user receives a warning together with the deviation in percent of the active substance used, see table below.

| Active substance | Limit | Okay/green * | Warning/orange* | Dangerous/red* | Toxic/black* |
|-------------------------------|-------|-----------------|-----------------|-------------------------------------------------------------|--------------|
| Broad therapeutic index | Below | 20 44404 | 80 – 90% | < 80% | |
| | Above | 90 – 111% | 111-125% | Maximum dosage OR >125% (if no maximum dosage is available) | >300% |
| Narrow therapeutic | Below | | 90 – 95% | < 90% | |
| index | Above | 95 – 105% | 105 – 111% | Maximum dosage OR >111% (if no maximum dosage is available) | >150% |

^{*} The status/colours and/or symbols are provided by the clinical information system, the medical practice or pharmacy software; the last column (toxic/black) may be shown together with "Dangerous/red".

If PEDeDose is specified in ranges, the highest (for upper limits) or the lowest value (for lower limits) is used for the tolerance calculation.

The dose check is not designed to detect over- or underdosages when several identical or similar substances are being prescribed to a child.

In addition to the single doses that remain constant throughout the day, it is also possible to check dosages at which the single doses are administered in different amounts throughout the day. The



number of single doses per day corresponds to the number of repetitions over 24 hours in equal time intervals: 1 single dose = 1×4 (every 24 h); 2 single doses = 2×4 (every 12 h); 3 single doses = 3×4 (every 8 h) etc.

5. Products

5.1Products assigned to the dosage lines

Products that match the dosages are assigned to the individual dosage lines. The products are selected according to the following criteria:

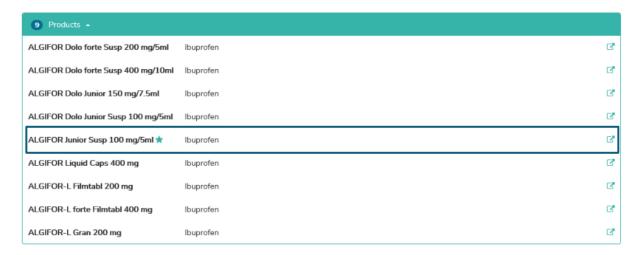
- Excipients: The excipients in a product are checked. If a product contains unsuitable excipients, this
 is noted under the "Product specific remarks", including the age up to which the excipient in question
 is unsuitable.
- Approval according to product information: If possible, products are linked that are approved for
 the indication and the age of the corresponding dosage line. If no approved products are available,
 off-label links are made, always taking into account further criteria such as excipients,
 contraindications, etc.
- Dosage strength: Usually, products are assigned to the dosage lines which, with regard to their dosage, are in a range covering half of the lowest dosage range to twice the highest dosage range.
 In the case of solid oral products, divisibility and crushability are taken into account in the assignment.

It is up to the healthcare professional to decide which product to use with an individual patient.

5.2Product lists

For institutions product lists can be created for display in PEDeDose. For this purpose, the institution will send PEDeus a list of products to be labelled by individual arrangement. These products will be marked with a star after processing by PEDeus in the respective institution. This is for example to display the institution's internal products or favourites in PEDeDose (see figure below for products lbuprofen, oral, liquid: One product is marked with a star).





In the list of active substances, a star indicates whether an active substance has links to labelled products.





6. Operating functions

6.1 Magnifying glass

If a magnifying glass is visible next to a search term, click on the symbol to return to this search term or select this search term (see in the example below next to the active ingredient lbuprofen).



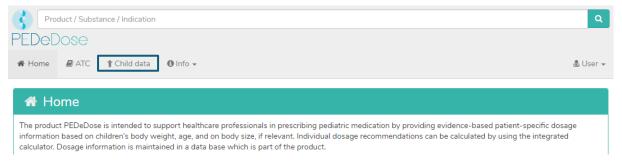
6.2Printing

If required, an extract can be printed from PEDeDose with a conventional printer (e.g. calculated dosages). It is recommended to generate a printed extract for a single application only.

7. Detailed instructions for use

7.1Child data

Clicking on "Child data" opens a window in which you can enter information concerning the child for whom a drug dosage is to be prescribed.



For individual dosage calculation, the following information is entered (the red asterisk marks the mandatory fields):

- date of birth
- weight [kg or g]
- height ([cm], only for drugs where the body surface is necessary for dose calculation or as a prerequisite for the calculation of the BMI)
- preterm infant (yes or no)
- gestational age at birth ([weeks and days], only after clicking "yes" in preterm infant)





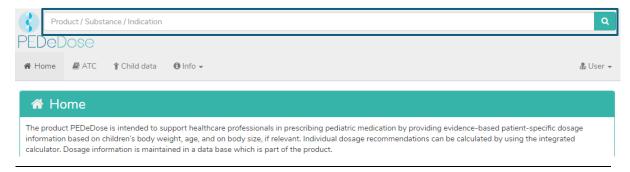
For preterm infants, select "Yes" in the field "Preterm infant". Subsequently, the gestational age at birth is entered in weeks and days (see section 3.3).

By checking the box below, the user can choose to be asked before each new calculation as to whether they wish to proceed with the previously entered child data ("Always confirm child information before calculation"). For systems accessing PEDeDose externally, this option can be turned off so that the user is not reaching the child information before the calculation. The users of the corresponding systems must be aware that PEDeDose assumes that the child information sent is correct and has already been verified by the user in the system accessing PEDeDose.

The entered data is saved by clicking on the "Save" button or deleted by clicking on the "Delete" button.

7.2Search

In the "Search" field, either a substance name, a drug indication or a product name can be entered; at least three letters or two letters (characters) and % can be entered. The search function is not case-sensitive.

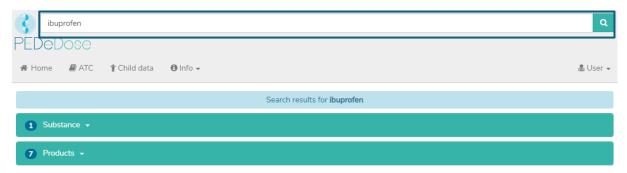




7.2.1Substance search

7.2.1.1 Substance

The substance name is entered in the "Search" field (e.g. lbuprofen).



The search results are displayed below the "Search" field. For the example "Ibuprofen", the search returned one substance and seven products as a result.

If the dosage only refers to one active ingredient of an active ingredient combination, this active ingredient is displayed in bold. In the example below, Amoxicillin is indicated as fat for the active ingredient combination Amoxicillin - Clavulanic acid, since the dosage in PEDeDose refers to Amoxicillin and not to the combination Amoxicillin - Clavulanic acid.



7.2.1.2 Indication

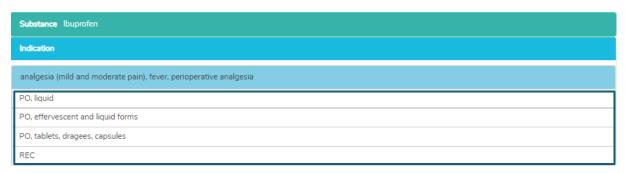
By clicking on the field "Substance" and then on the substance (lbuprofen), the "Indication" field is opened (one indication for the selected example):





7.2.1.3 Application

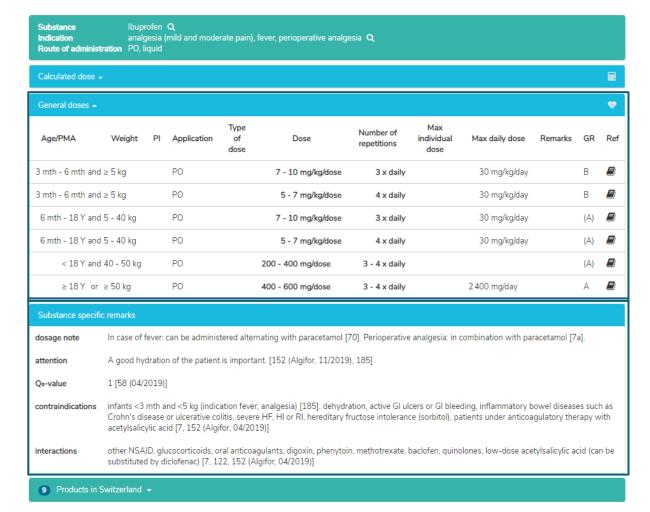
Clicking on an indication (in this case "analgesia (mild and moderate pain), fever, perioperative analgesia") opens the selection of application (route of administrations/galenic groups), see below.



7.2.1.4 General doses

Clicking on an application (i.e. "PO, liquid) opens the "General Doses" window, see below.

If there are substance specific remarks on the selected active substance, these are displayed below "General dosages"; see below (this includes e.g. dosage notes, attention remarks, contraindications).





The "General Doses" window provides the following information:

| General doses Information | Explanation | |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Age/PMA | Age of the child for whom the dosage is recommended | |
| | (PMA: postmenstrual age, in case of a dose for a preterm infant, displayed by "PI" between the headings "weight" and "application") | |
| Weight | Weight of the child for whom the dosage is recommended | |
| PI | Preterm infant (a dosage line with "PI" is recommended for preterm infants) | |
| Application | Route of administration (REC, PO, IV, IM, etc.) | |
| Type of dose | Loading dose, maintenance dose, etc. | |
| Dose | Usually in mg/kg/dose, for adults often mg/dose | |
| Number of repetitions | Number of repetitions per day (2 x daily, 3 x daily, etc.) | |
| Max individual dose | Maximal dose per single administration | |
| Max daily dose | Maximal dose per day | |
| Remarks | Remarks regarding dosage, application, etc. | |
| GR | Grade of recommendation (see chapter 0) | |
| Ref | Reference (number of reference on which the dosage is based), see "Literature" (chapter 7.5) for reference list. The "book symbol" works as a "mouse-over button (does not work on tablets and smartphones. In these cases, the references are directly accessible). | |

(A)

Effective date: 11/2021

360 mg/day

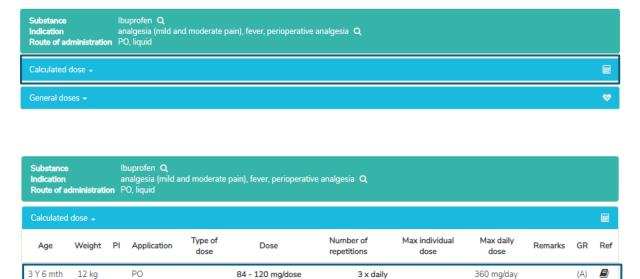


7.2.1.5 Calculated dose

A click on "Calculated Dose" opens a window with the individually calculated dose for the child whose data have been entered in the field "Child data". Below the section "Calculated dose", the child data (date of birth, weight, height, preterm infant, GA (gestational age) at birth) are displayed. (There are two rows in the example below because there are two different numbers of repetitions (3 x daily and 4 x daily).)

The line of the individually calculated dose shows the age and weight of the child for whom the dose has been calculated (in the example below "3 Y 6 mth", "12 kg").

Below the section "Calculated dose", the grey bar shows the following data of the child: date of birth, weight, height, BMI, premature infant (PI) and chronological age (chronA). For premature infants, instead of the chronological age, the gestational age at birth (GA) as well as the postmenstrual age (PMA) and the postnatal age (PNA) or the corrected age (corrA).



7.2.1.6 Products in Switzerland

PO

Date of birth 10.05.2017 Weight 12 kg Height 92 cm BMI 14 PI Yes

3 Y 6 mth

12 kg

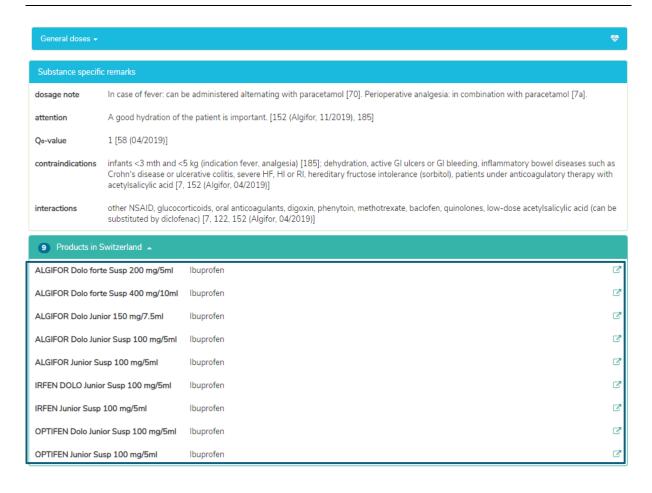
For users in Switzerland, clicking on "Products in Switzerland" will open a window under "General doses"/"Substance-specific remarks" with products containing the searched substance and route of administration of interest and the galenic form (Ibuprofen, oral, liquid in the example stated below).

60 - 84 mg/dose

4 x daily

GA 30 6/7 WOP



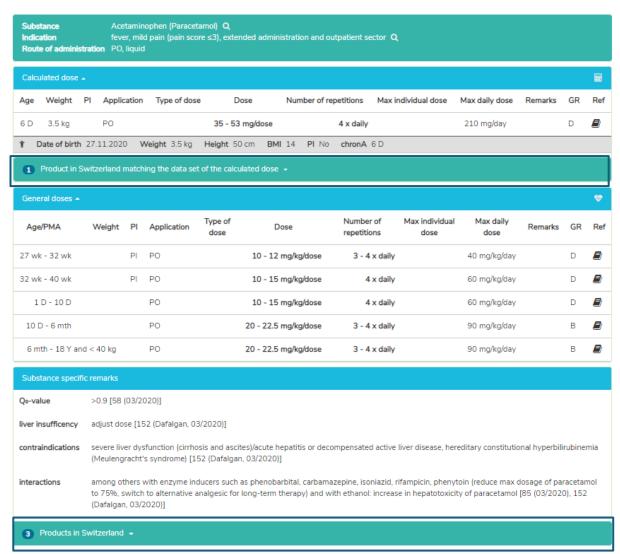


By clicking on the button on the right in the field "Products in Switzerland" the short information of HCl Solutions AG is opened in www.compendium.ch for the selected product, see below. To use the link from www.compendium.ch back to PEDeDose, the user must be logged in to www.compendium.ch.





Below the "General doses" you will find a list of linked products in Switzerland that fit all or only certain dosage lines (3 products in the example below, click to select the list), while below the "Calculated dose" you will see only those products that fit the data set used for the calculation (1 product in the example below, click "Products in Switzerland matching the data set of the calculated dose" to display the list for selection).

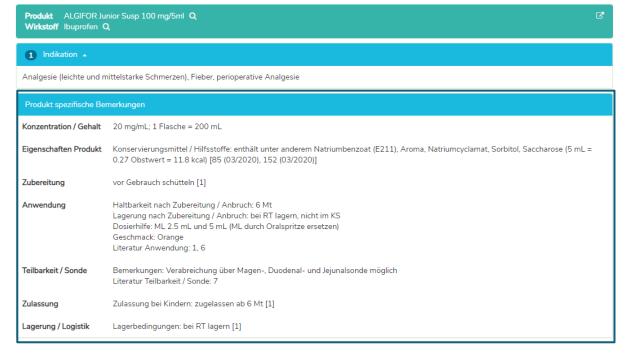




7.2.1.7 Product-specific remarks

By clicking on a product below the "Product in Switzerland" field (ALGIFOR Junior Susp 100 mg/5ml in the example), the "Product-specific remarks" window opens, as shown below. However, this information is available only in German and French for users in Switzerland.





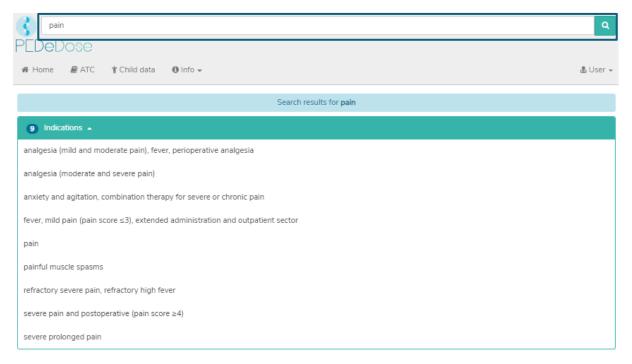
In the "Product-specific remarks" window you can find information about the selected product, for instance concentration/content, preservatives/excipients, dosing aids, divisibility/enteral feeding tube, storage/conditions. "Product-specific remarks" of a product can be either "on label" or "off label". When assessing whether it is an "on label" or an "off label use", users must consult the product information. There are not "Product-specific remarks" for all products.



7.2.2 Indication search

7.2.2.1 Indication

The indication is entered in the "Search" field (e.g. pain).



The results are listed below the field "Indications" (9 results for the example pain).

7.2.2.2 Substance

By clicking on an indication (i.e. analgesia (mild and moderate pain), fever, perioperative analgesia), the "Substance" field is opened (one substance for the selected indication):



PEDeDose is not intended to be used as a diagnosis handbook. Therefore, searching by an indication does not mean to get back a complete list of substances, which should be applied to a child with a specific diagnosis, but just a selection of substances. Vice versa not all of these substances should be prescribed for a child in a specific clinical situation.



7.2.2.3 Application

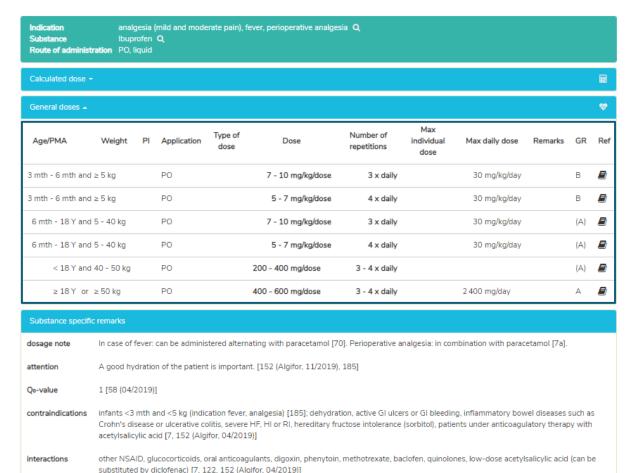
Clicking on a substance (example "lbuprofen") opens the selection of the application (route of administrations/galenic groups) see below.



7.2.2.4 General doses

9 Products in Switzerland •

Clicking on an application (example "PO, liquid") opens the "General doses" window, see below.



In the "General doses" window you see the information described in point 7.2.1.4.

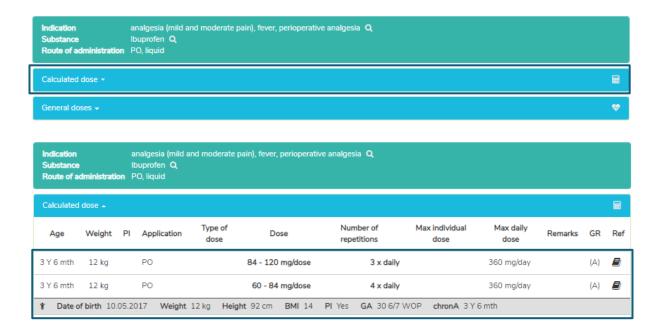


7.2.2.5 Calculated dose

A click on "Calculated dose" opens a window with the individually calculated dosage for the child whose data have been entered in the field "Child data". Below the section "Calculated dose", the child data (date of birth, weight, height, preterm infant, GA (gestational age) at birth) are shown. (Two lines are displayed in the example below because there are two different numbers of repetitions (3 x daily and $4 \times \text{daily}$).)

The line of the individually calculated dose shows the age and weight of the child for whom the dose has been calculated (in the example below "3 Y 6 mth", "12 kg").

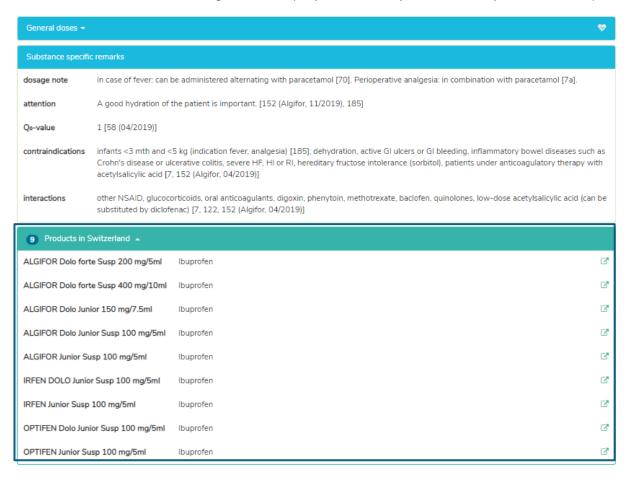
Below the section "Calculated dose", the grey bar shows the following data of the child: date of birth, weight, height, BMI, premature infant (PI) and chronological age (chronA). For premature infants, instead of the chronological age, the gestational age at birth (GA) as well as the postmenstrual age (PMA) and the postnatal age (PNA) or the corrected age (corrA).





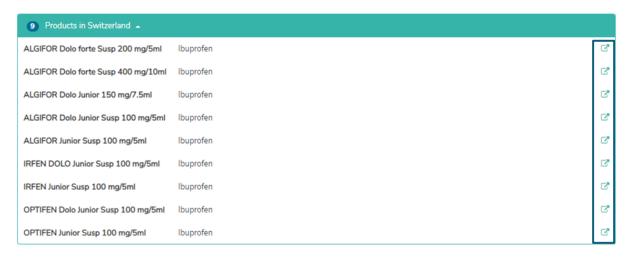
7.2.2.6 Products in Switzerland

For users in Switzerland, clicking on "Products in Switzerland" will open a window under "General doses"/"Substance-specific remarks" with products containing the searched substance and route of administration of interest and the galenic form (Ibuprofen, oral, liquid in the example stated below).

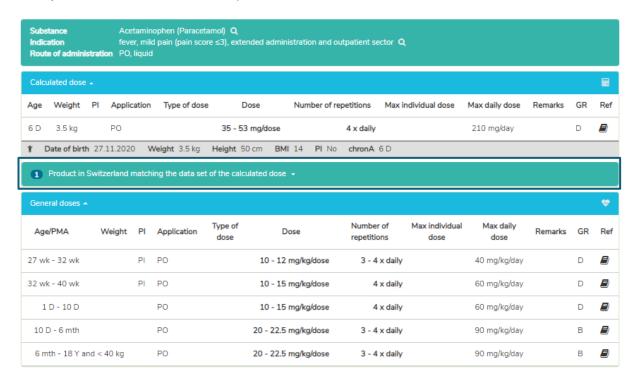




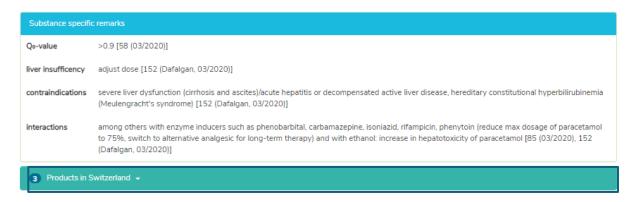
By clicking on the button on the right in the field "Products in Switzerland" the short information of HCl Solutions AG is opened in www.compendium.ch for the selected product, see below. To use the link from www.compendium.ch back to PEDeDose, the user must be logged in to www.compendium.ch.



Below the "General doses" you will find a list of linked products in Switzerland that fit all or only certain dosage lines (3 products in the example below, click to select the list), while below the "Calculated dose" you will see only those products that fit the data set used for the calculation (1 product in the example below, click to select the list).







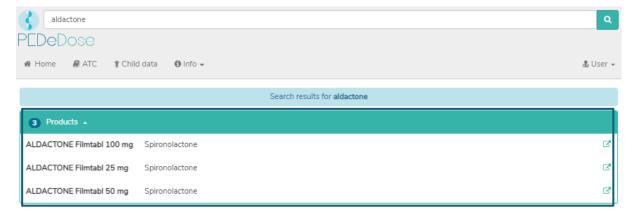
By clicking on the "Product in Switzerland" field and a product (ALGIFOR Junior Susp 100 mg/5ml in the example), the "Product-specific remarks" window opens, see section 7.2.1.7.

7.2.3 Product search

The product search is only available for users in Switzerland. Indications, dosages and "Product-specific remarks" displayed on a product can be either "on label" or "off label". When assessing whether it is an "on label use" or an "off label use", users must consult the product information.

7.2.3.1 Product

The product name is entered in the "Search field" (e.g. Aldactone).



The search results for Aldactone are listed below the heading "Products", see picture above (three products for Aldactone).



7.2.3.2 Indication

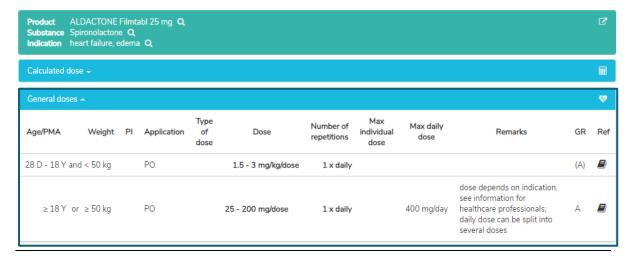
By clicking on a product in the list (e.g. ALDACTONE film tabl 25 mg), the selection of indications is opened (one indication for the example ALDACTONE film tabl 25 mg):



Only in the German and French PEDeDose version of users in Switzerland, you can find the "Product-specific remarks" regarding the selected product below the indications. In this field, additional information about the selected product is displayed (e.g. preservatives, excipients, divisibility/storage). There are not "Product-specific remarks" for all products.

7.2.3.3 General doses

Clicking an indication (in this case "heart failure, edema") opens the window "General doses", where all dosages for the selected product are displayed, see below.



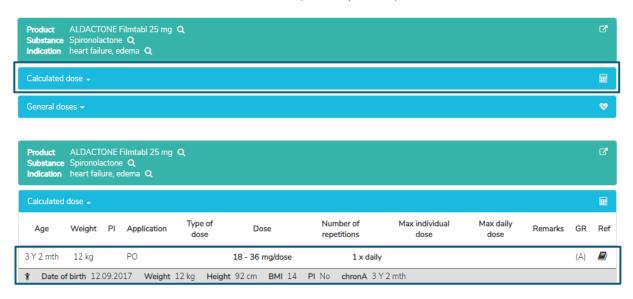
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In the "General doses" window you see the information described in point 7.2.1.4.

7.2.3.4 Calculated dose

A click on "Calculated dose" opens a window with the individually calculated dose for the child whose data have been entered in the field "Child data" (see chapter 7.1).



The line of the individually calculated dose shows the age and weight of the child for whom the dose has been calculated (in the example above "3 Y 2 mth", "12 kg").

Below the section "Calculated dose", the following child data are displayed in the grey bar: date of birth, weight, height, BMI, preterm infant (PI) and chronological age (chronA), for preterm infants instead of the chronological age the gestational age (GA) at birth and the post-menstrual age (PMA) as well as the post-natal age (PNA) or the corrected age (corrA).

In the "Product-specific remarks" window you see the information described in point 7.2.1.7.

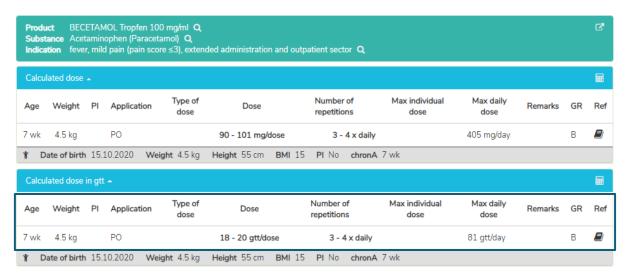
7.2.3.5 Dose conversion

The calculated dose can be converted by the calculator from the initial unit to an alternative unit (dispensing unit) (e.g. from mg to drops or mL). To do this, the field "Calculated dose in [alternative unit]" appears under the "Calculated dose" field, see below.





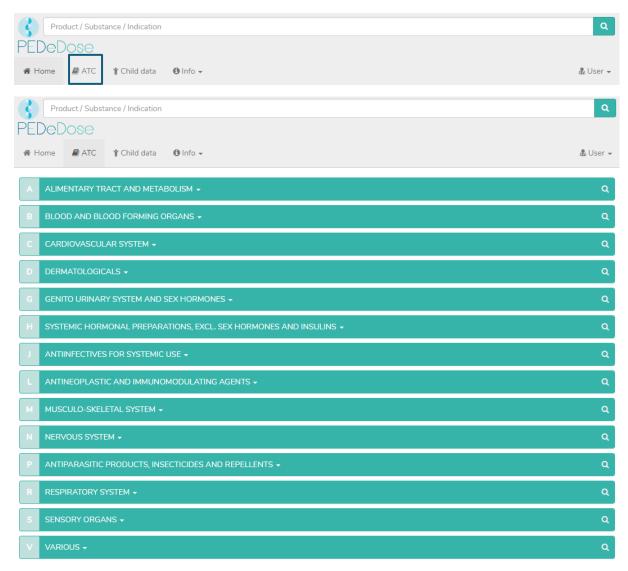
By clicking on the field "Calculated dose in drops (gtt)" the dose line for the individually calculated dose in drops (gtt) opens in addition to the individually calculated dose, see below.





7.3ATC code

By clicking the "ATC" button at the top of the page, the ATC code selection drops down, see below.



Select the appropriate path to go to the substance of interest. By clicking on the button on the right (magnifying glass), the substances (and if applicable, products) can be selected, see below.



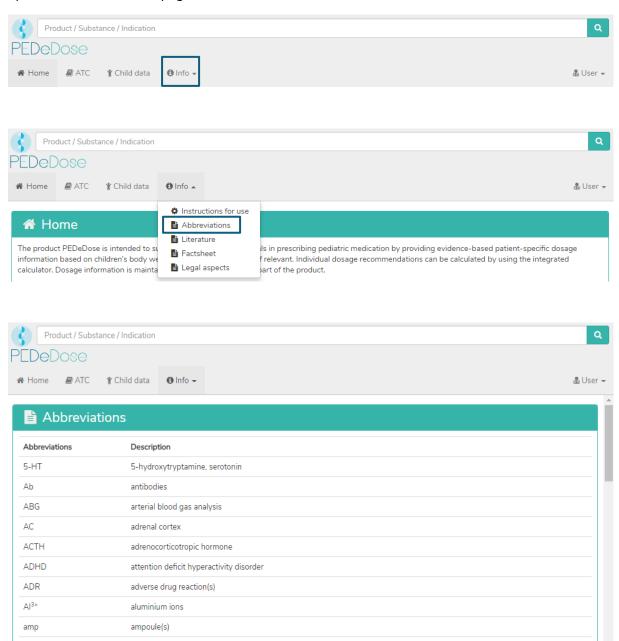
The substances not marked with a magnifying glass are not included in PEDeDose.



7.4Abbreviations

ANCA

Click on the "Info" button at the top of the page to open a drop-down menu. Selecting "Abbreviations" opens the "Abbreviation" page, which lists all the abbreviations used in PEDeDose, see below.



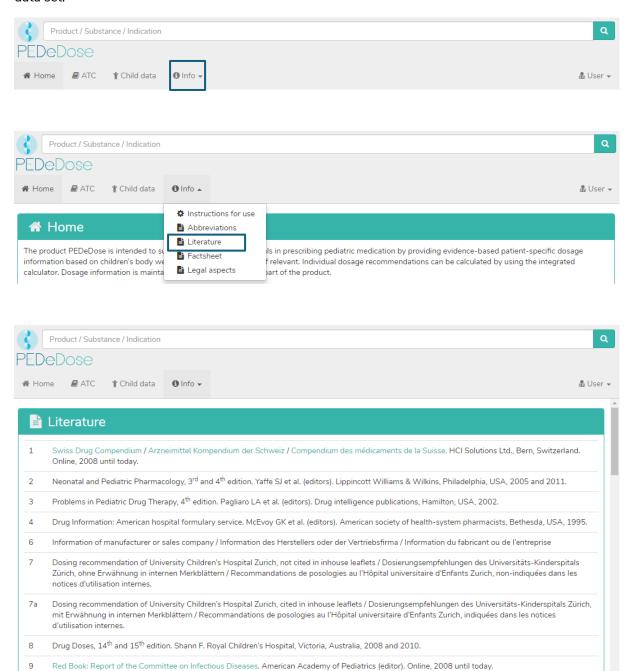
antineutrophil cytoplasmic antibodies



7.5Literature

Click on the "Info" button at the top of the page to open a drop-down menu. Selecting "Literature" opens the "Literature" page, which lists all references used in PEDeDose.

The literature indicated in a dosage line refers to either the entire data set or only partial aspects of the data set.





8. Complaints and feedback

We kindly want to inform you that technical and content-related errors you have detected in PEDeDose have to be reported immediately, but no later than 48 hours after detection to PEDeus via email (info@pedeus.ch). Similarly, all serious incidents relating to the product must be reported to PEDeus and the competent authority of the member state where the user is based.

9. Contact information

9.1General data

PEDeus AG Technoparkstrasse 1 8005 Zurich Switzerland info@pedeus.ch +41 (0)44 521 73 80

9.2Web addresses PEDeDose application

- www.pededose.ch (main address)
- www.pededose.net
- www.pededose.org



10. Primary label

Basis-UDI-DI of the PEDeDose Software: 7649996181015PEDeDoseSW

The UDI number for the current version of PEDeDose software can be found in the footer accessible to all registered users on the PEDeDose website.

The maximum product lifetime (version mentioned below) is 5 years.

| REF | PEDeDose Software 2.3 | | | |
|------------|---------------------------------------------------------------------------------------------------------------------|-----------------------------|--|--|
| سا | 12-2020 | | | |
| \square | 12-2025 | | | |
| Ţ i | Available at: https://www.pededose.ch/ | | | |
| UDI-PI: | Available at: https://www.pededose.ch/ | | | |
| ш | PEDeus AG Technoparkstrasse 1 8005 Zurich Switzerland info@pedeus.ch https://www.pedeus.ch/ | CHRN: CHE341324507 | | |
| EC REP | European authorized representative: Johner Medical GmbH Niddastrasse 91 60329 Frankfurt am Main Germany | SRN: DE-AR- 000011832 | | |

11. Certifications

- PEDeus AG holds the ISO 13485:2016 certificate for "Design and Development, Production and Distribution of Pediatric Clinical Decision Support Software for Healthcare Professionals"
- PEDeus AG obtained the certification according to MDR, Class IIa Medical Device (PEDeDose Software) in December 2020.