

Note: << text >> gives information on technical details and conditions for automatic checks. It will not be visible for users

General notice: A value **must** be entered/selected for every field. If the information is not known (or currently not reachable), select one of the "**unknown**" options. Otherwise, the form cannot be stored.

Patient

| Field | Manual |
|--|---|
| Date of registration: [Date] → Initial Documentation (Doc.) date | < <this (based="" automatically="" by="" clock)="" date="" is="" on="" server="" stored="" system="" the="">></this> |
| Patient consent: signed not applicable (deceased) | Patients have to give their written consent before you enter data. For minors, parents or the legal guardian have to give their written consent. Indicate what kind of consent the patient has given. "Not applicable" can only be selected for patients who have died before initial registration. Please check with your local data protection laws whether you can report deceased patients without consent. |
| Supplement to data-protection information has been sent to the patient: yes/no/unknown plus date (depricated) | If for some reason a previous consent version has been signed, it has to be amended by a supplement, reflecting the GDPR. |
| | For newly registered patients a current GDPR-compliant consent version must be used. |
| Date of birth [Year] [Month] | If patient < 12 years old: Enter year AND month If patient >= 12 years old: Enter ONLY the year This restriction is necessary because of data protection regulations. << The month will remain stored when the child turns 12 years old >> |
| Country of birth: [List of countries, unknown] | |
| Country of current residence: [List of countries, unknown] | Select the country of current residence for this patient. This should be the country where the patient has his permanent residence, i.e. where he lives for the majority of the year. If the patient stays in the current country for a longer period, but only temporarily (e.g. for specialized medical treatment or seasonal work , select his country of origin. |
| Sex: ☐ female ☐ male ☐ unknown | Select the genetic sex at birth |
| Death before initial registration: ☐ (check box) | In general, only living patients should be (newly) reported. However, you can report deceased patients if a) your centre or national registry has a specific policy or runs a specific study that makes this necessary b) if the patient died shortly before registration. < <if "death="" afterwards="" asked="" be="" centres="" deceased="" form"="" not="" open.="" patients="" report="" selected,="" the="" to="" update="" will="">></if> |
| Familial case: ☐ yes ☐ no ☐ unknown | Indicate if there is another patient with a diagnosed primary immunodeficiency in the genetic family (e.g. parents, siblings, grandparents). If there was no clear diagnosis of a PID, select "unknown". |
| If yes, index patient ESID ID: ☐ This is the index patient ☐ more than one index patient | < <only "familial="" "yes"="" case"="" if="" is="" visible="">> If available, enter the ESID patient ID of the first pat diagnosed with this immunodeficiency in the respect</only> |

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| | | | family (index case) If the current patient is this index case, select the checkbox "This is the index patient" | |
|--|--|--|---|------|
| | | | Select "more than one index patient" e.g. if the patie forms the "missing link" between two index patients. | |
| Ī | Index patient is the patient's: | | < <only entered="" esid="" id="" if="" index="" is="" patient="" visible="">></only> | |
| | < <drop brother="" daughter,="" down:="" grandson="" nephew,="" niece="" sis<="" son="" td=""><td>ster,</td><td>Indicate the relationship of the current patient to the index patient.</td><td>!</td></drop> | ster, | Indicate the relationship of the current patient to the index patient. | ! |
| half-brother/sister, cousin, wife/ husband, father/mother, uncle/aunt, grandfather/- | | | <>Family branch only appears for options from "uncle/aunt" to "other">> | |
| | mother, granduncle/-aunt, great- grandfather/-mother, other, unknown >> | | Indicate which side of the family the index patient belongs to (paternal = father's side, maternal = moth side) | her' |
| | Additional index patient ESID ID: | | < <only "more="" be="" has="" if="" index="" one="" patient"="" selected="" than="" visible="">></only> | eer |
| Twin | : | | | |
| ☐ ne | o ☐ yes: identical | | | |
| yes: non-identical | | | | |
| □ ye | es, but heredity unknown 🗌 unknown | | | |
| | anguinity of parents: s ☐ no ☐ unknown ☐ probable | | ate whether the parents or other ancestors (e.g. lparents) of the patient are genetically related. | |
| • | ected founder effect: es no unknown | small and n were ances gener | under effect: If a population arises only from a set of individuals, their genetic variability is limited night inherit more commonly genetic defects if they present in the 'founding' individuals. When stors of a patient come from the same small cically isolated region a founder effect can be sected.>> | |

| The ESID Registry | | | |
|--|--|--|--|
| 🔑 Select patient 🎏 New patient 🌁 Ad | min ~ | | |
| Create Patient | | | |
| Patient Consent | Signed | | |
| Supplement to data-protection information has been sent to patient | ● No ● Yes ● Currently unk. ● Truly unk. Send date: | | |
| Date of birth | Year: Month: | | |
| Country of Birth | ☐ Currently unk. ■ Truly unk. | | |
| Country of current residence ? | □ Currently unk. □ Truly unk. | | |
| Sex | ■ Female ■ Male ■ Currently unk. ■ Truly unk. | | |
| Death before initial registration | | | |
| Familial Case | No ● Yes ■ Currently unk. ■ Truly unk. | | |
| Twin | ● No | | |
| Consanguinity of parents | ● No ● Yes ● Probable ● Currently unk. ● Truly unk. | | |
| Suspected founder effect | No ● Yes ■ Currently unk. ■ Truly unk. | | |
| Documenting Centre | v | | |
| Create Reset | | | |

Fig 1. Initial registration of a patient, User interface, centre is automatically selected/set for standard user

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| Co | nsent | ŀ | |
|----|--------|---|--|
| CU | 112611 | | |

| Consent version: : [List of consent versions applicable for the given centre] | Available versions for a given centre are selected in the backend via the admins, if consent is renewed a list will build up with all previous consents. |
|---|--|
| Research option: ☐ yes ☐ no | As selected in the patient consent form |
| Pharma option: ☐ yes ☐ no | As selected in the patient consent form |
| Non-EU option: ☐ yes ☐ no | As selected in the patient consent form |
| Date of signature: [Date] | Enter the date of the patient's signature. {calendar function implemented} |

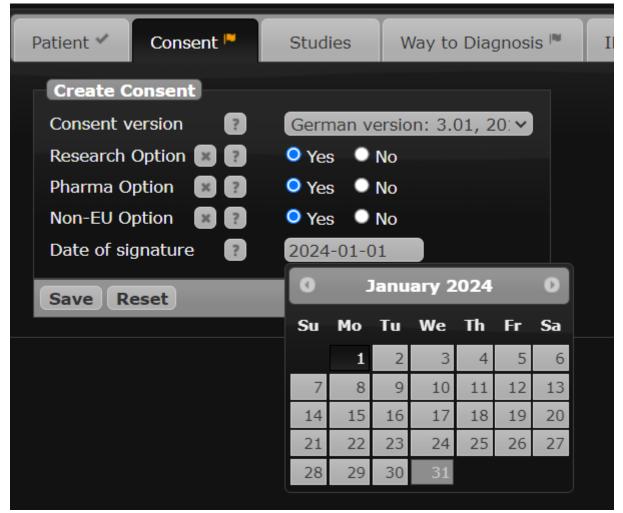


Fig 2-1: Documentation of (new) consents



Fig 2-2: Representation of (list) of consents (history of consents) and options

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Studies

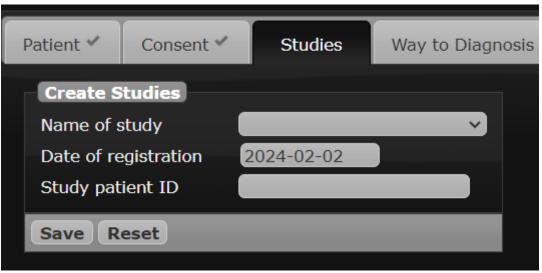


Fig 3: Enter the study details here. The study ID is generated by the system, or provided by a registration office (depends on study)

Way to diagnosis

| Date of first clinical diagnosis of IEI [Year] [Month] [Day] unknown Only genetically diagnosed | < <cannot be="" birth="" date="" of="" previous="" to="">> Enter the date when this patient was first diagnosed with a primary immunodeficiency based on clinical features and laboratory values. If month and/or day are unknown, leave them open. If the date is completely unknown, select "date unknown". If the patient has been given a genetic diagnosis before developing any clinical symptoms, select "only genetically diagnosed".</cannot> |
|--|--|
| First IEI-related symptom(s): < <one of="" or="" several="">> ☐ Infection ☐ Immune dysregulation ☐ Malignancy ☐ Syndromal manifestations ☐ other (if selected) Description: <<or>> ☐ First symptoms unknown <<or>> ☐ no IEI-related symptoms at all → If "no IEI related symptoms" is selected the field "Diagnosis by lab abnormalities only" will appear, and "Date/Age of onset of symptoms" will disappear</or></or></one> | Indicate the first clinical symptoms suggestive of a IEI in this patient (which is not necessarily the symptom leading to diagnosis). Select one or several. If the type of symptoms is unknown, select 'First symptoms unknown'. If there were no IEI-related symptoms at all, select 'no IEI-related symptoms'. Enter the information based on the physician's judgement (as noted in the patient chart) and not based on the patient's opinion. Definitions: Immune dysregulation: lymphoproliferation (splenomegaly, hepatomegaly, lymphadenopathy), granuloma, autoimmunity (e.g. cytopenia, thyroid disease, joint disease, hepatitis, vitiligo, alopecia, diabetes), inflammatory bowel disease, celiac disease, vasculitis, eczema, autoinflammatory disease Syndromal: Dysmorphic features such as short stature, facial abnormalities, microcephaly, skeletal abnormalities, other organ manifestations such as albinism, hair or tooth abnormalities, primary neurodevelopmental delay, seizures |

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| Date/Age of onset of symptoms [Year] [Month] or approximate age in years: [list with <1, 1-5, 6-10, 11-15, 16-20, 21-25, 26-30 etc.(in steps of 5),, 51-100] or unknown | < <will "absence="" "no="" "yes"="" and="" be="" been="" can="" cannot="" clinical="" diagnosis.="" exception:="" field="" form="" genetic="" has="" if="" in="" is="" later="" next="" not="" of="" one="" only="" selected="" selected.="" stored="" symptoms"="" than="" the="" these,="" visible="">> Enter the year and month when the first symptoms suggestive of a IEI (see above) appeared in this patient. If the month is unknown, leave it open. If you only know the date approximately, select an entry from the list. Enter the date based on the physician's judgement (as noted in the patient chart) and not based on the patient's opinion. If only the frequency of infections raises the suspicion of a primary immunodeficiency, select the date when the suspicion came up, analogous to what is outlined in the chapter above related to first symptom. E.g. if only the third otitis media within a year raised the suspicion, please document the date of that third otitis. <<only [date,="" be="" can="" list,="" of="" one="" selected="" unknown]="">></only></will> |
|--|---|
| Diagnosis by lab abnormalities only? ☐ yes ☐ no ☐ unknown | Examples for this are: (1) The patient's blood was investigated due to non-PID related symptoms (2) The patient's blood was screened due to familial cases of PID < <will "no="" also="" and="" be="" been="" can="" case.="" clinical="" date="" diagnosis="" entered="" has="" if="" in="" is="" latter="" of="" only="" onset="" or="" prior="" selected="" symptoms="" symptoms"="" symptoms.="" the="" to="" visible="">></will> |
| If yes, "Type of lab abnormalities" will appear: Lymphopenia Neutropenia Thrombocytopenia Anaemia Monocytopenia Elevated IgE Newborn screening Hypogammaglobulinaemia Hypergammaglobulinaemia (other that elevated IgE) elevated complement complement deficiency Other, (if selected) Description: | < <will "yes"="" be="" been="" has="" if="" marked="" only="" previous="" question="" the="" visible="">> Select one or several. If there was another kind of lab abnormality leading to the diagnosis of PID not given here, select "other" and description. Definition for hypogammaglobulinemia: values for IgA, G or M below age-related normal range.</will> |

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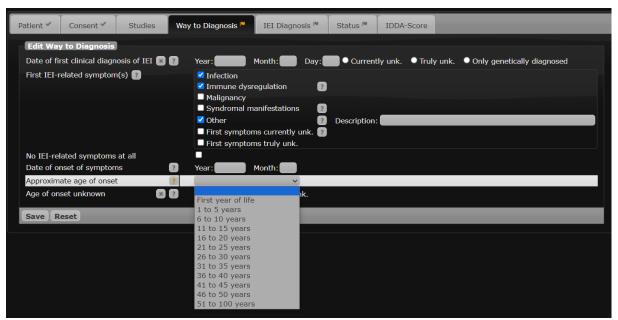


Fig 4-1: Way to diagnosis with symptoms

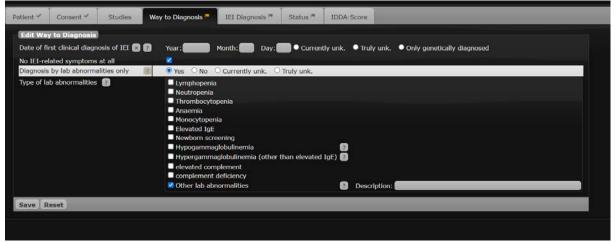


Fig 4-2: Way to diagnosis with lab abnormalities only

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IEI Diagnosis

| Current IEI diagnosis | < <users a="" and="" at="" available="" be="" by="" can="" diagnosis="" documentation="" either="" entering="" entry="" for="" genes.="" iei="" is="" later="" new="" only="" or="" permanently="" replaced="" search="" select="" stored="" string="" the="" timepoint="">> Select the most recent IEI diagnosis for this patient (corresponding to the most recent visit date or date of last news). If you cannot find the appropriate disease, or if a disease is missing, please send an email to registry@esid.org</users> |
|---|---|
| Affected gene: [List of genes] < <or></or> | <relevant "no="" "not="" "unknown"="" (where="" a="" according="" addition,="" and="" appear="" appropriate).="" as="" diagnosis;="" found"="" genes="" genetically="" in="" is="" list="" mutation="" no="" note="" option!="" selected="" tested"="" that="" the="" there="" to="">> Select the gene in which disease-causing mutation(s) have been found in this patient. If you have sequenced one or more of the known genes but have found no mutation, select "no mutation found". If no molecular analysis has been performed at all, select "not genetically tested". If a gene is missing, send an email to registry@esid.org</relevant> |
| Additional genes: | If more than one IEI-causing gene mutation has been found in this patient, or if other gene mutations have been found, you can enter these here. |
| Date of genetic diagnosis: [Year] [Month] [Day] < <or>> unknown</or> | < <will "prenatal="" 9="" affected="" an="" be="" been="" birth="" birth.="" can="" cannot="" date="" diagnosis"="" exception:="" field="" form="" gene="" has="" if="" in="" is="" less="" months,="" next="" of="" only="" previous="" selected.="" stored="" than="" the="" to="" visible="">> If applicable, enter the date when the genetic diagnosis was confirmed (date of molecular analysis). If month and/or day are unknown, leave them open. If the date is completely unknown, select "Date unknown"</will> |
| Lab that performed the genetic analysis: < <drop down="" list="">></drop> | < <only "no="" a="" found"="" gene="" has<br="" if="" mutation="" or="" visible="">been selected >> If the lab that performed the analysis is not in the list, please send an email to esid-registry@uniklinik-freiburg.de</only> |
| Sequencing method: Gene sequencing Whole exome/genome sequencing Non-genetic definitive test Unknown | < <will affected="" an="" be="" been="" gene="" has="" if="" only="" selected="" visible="">> Select the sequencing method applied. If the molecular analysis was performed as a candidate gene testing (using the "traditional" method of Sanger sequencing), select "Gene sequencing". If the whole genome or exome was sequenced, select that option. If a non-genetic test like 22q11 FISH for DiGeorge syndrome was used, select 'Non-genetic definitive test'.</will> |
| Reason for genetic analysis: Analysis following clinical diagnosis Family screening Prenatal diagnosis Diagnosis by neonatal screening unknown | < <will affected="" an="" be="" been="" can="" gene="" has="" if="" one="" only="" selected.="" visible="">> Select the reason for the molecular analysis in this patient.</will> |

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Optional (depending on selected diagnosis)

Do you want to add L2 documentation?

yes no Ask again later

| Yes no Ask again later | Selected of the presented of the presented

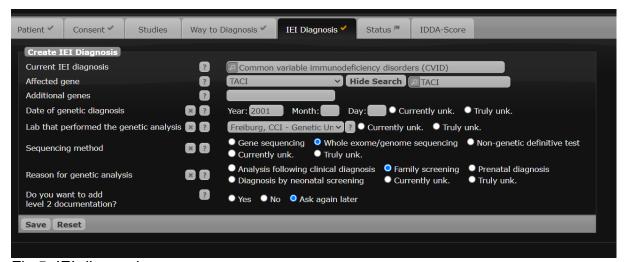


Fig 5; IEI diagnosis

Status:

This data shall be entered for the initial documentation date and updated on every subsequent documentation date (slightly different set of items for baseline/follow-up). Depending on the selected options, additional TABs may appear (please see below).

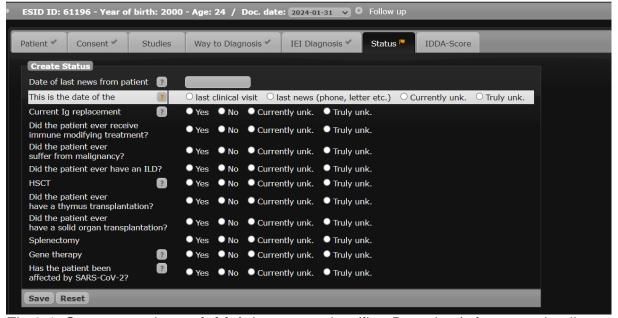


Fig 6-1: Status overview at **initial** documentation (first Doc. date), for more details on the items please refer to the next section on Follow-up.

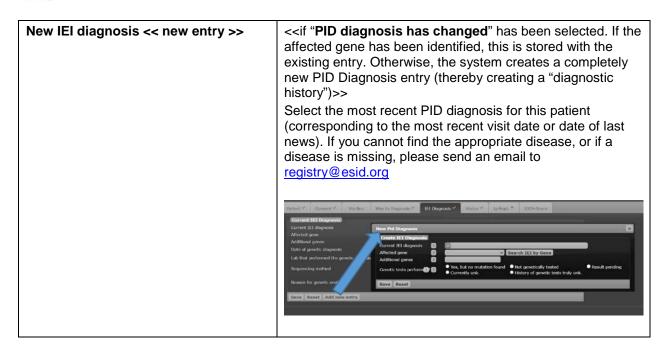
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| Follow-up | |
|--|---|
| Date of last news from patient: [Date] < <or></or> | << Can only store a date that comes after the most recent documentation date. >> Enter the date when you last received news on the patient. If you have no news at all from the patient, please select 'No news from patient since last documentation'. |
| This is the date of the: last clinical visit last news (phone, letter etc.) unknown | Indicate whether this is the date of the last patient visit to the physician or hospital, or whether information was received e.g. by telephone from the patient, the patient's family or a physician. |
| All following questions refer to the timepoint | of the patient's last visit or date of last news. |
| Current status: Alive Deceased Lost to follow-up Discharged after complete recovery | Indicate whether the patient is still alive based on the latest information you have. If you have no information on the current status of the patient because you have lost contact to him/her and do not expect to hear from him/her again, select "lost to follow-up". If the patient is not followed anymore because the immunodeficiency has resolved, select 'discharged after complete recovery'. << If "deceased" is selected, the "Death report form" (TAB) will open. Please refer to Annex A. Centres will not be asked to update patients with status "deceased", "lost to follow-up" and "Discharged" afterwards. For patients with status 'alive' the system will create an email reminder for F/U documentation one year after the last Doc. date >> < <op> <<op> <<op> ></op></op></op> |
| [free text] | If the patient is lost to follow-up, you may enter details here (e.g. name of physician the patient was referred to) Current status Details on status Output Details on status |
| Changes to diagnosis | |
| No change << default value >> < <or>>< PID diagnosis has changed <<or>>< No PID after all</or></or> | If the IEI diagnosis has changed or if you have identified the affected gene, select "PID diagnosis has changed" and fill in the respective fields in TAB "IEI diagnosis:" A Alert Is there a completely new diagnosis? In this case, please go to "IEI Diagnosis" and click on "Add new entry". If the diagnosis is the same, but the genetic defect has been identified (e.g. Btk. for agammaglobulinaemia), please go to "IEI Diagnosis" and enter the genetic information only. OK If the diagnosis of an IEI has been incorrect and there is no IEI in this patient at all, please select "No PID after all". |

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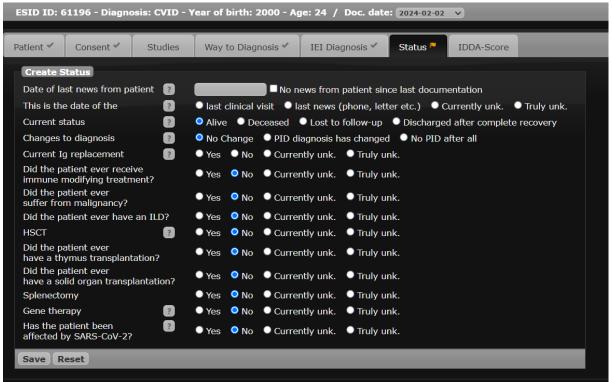


Fig 6-2: Status at **follow-up** documentation (please note additional items: "Current status" and "Changes to diagnosis", prefilled with default values where possible). If there are no further changes to previously documented items, the follow-up is completed with updating this.

Immunoglobulin (Ig) replacement, additional TAB

| Does the patient currently receive Ig-replacement? | Current Ig replacement |
|--|--|
| ☐ Yes ☐ No ☐ unknown | |
| Date of first Ig replacement | << Cannot be previous to the date of birth>> |

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| [Year] [Month] [Day] < <or>> ☐ Date unknown</or> | Give the date when Ig replacement was first applied in this patient. If month and/or day are unknown, leave them open. If the date is completely unknown, select "Date unknown". |
|---|---|
| Current brand name [List of brand names] < <or>> unknown</or> | Which brand of immunoglobulins does the patient currently use? |
| Current route of administration Subcutaneous Intravenous Intramuscular Push | < <route a="" automatically="" brand="" by="" if="" is="" name="" respective="" selected="" system="" the="">></route> |
| Current place of administration home hospital hospital: inpatient hospital: outpatient both (home&hospital) Office outpatient unknown | Select the place of administration of Ig replacement. If the infusion is given in a hospital, indicate whether this is done during an inpatient or outpatient stay. If this is not known, choose the option "hospital". |
| Patient's current weight [integer] kg ☐ unknown | << If brand name, weight, and absolute dose are entered, the system will calculate and store the mg/kg dose. If the mg/kg is entered manually in addition and differs from the calculated value, the system asks the user which value should be used.>> |
| Current dose [integer] mg/kg body weight or [decimal] g ml dose unknown Interval for this dose Every [integer] week(s) day(s) < <or>> [integer] times per week month year interval unknown</or> | Indicate the current dose and frequency of Ig replacement in this patient. Enter the relative dose (per kg body weight) or the absolute dose, or both, if available. Enter the actual interval , e.g. if the patient applies 10 ml of SCIg every second day, enter "10 ml every 2 days", and NOT "35 ml every week". In the case of alternating doses (e.g. "10 ml one week and 20 ml the next week"), calculate the mean value (e.g. "15 ml every week"). |
| Current side effects ☐ Yes ☐ No ☐ unknown | Indicate whether the administration of the current Ig replacement has ever caused or is still causing side effects. |
| If yes, type of side effects <one or="" possible="" several="">></one> | Current side effects |

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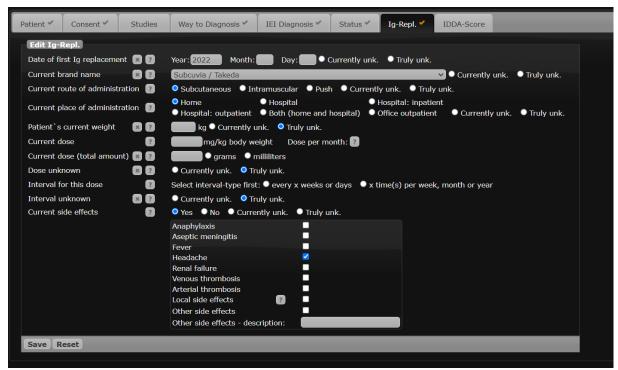


Fig 6-3: Optional Ig-Replacement TAB

Immune Modifying Treatment, additional fields inline



Fig 6-4: Options for immune modifying treatment can be selected by clicking on the respective item in 'available options' and will then be moved to the list of selected options

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Malignancy, additional fields inline



Fig 6-5: List of Malignancies

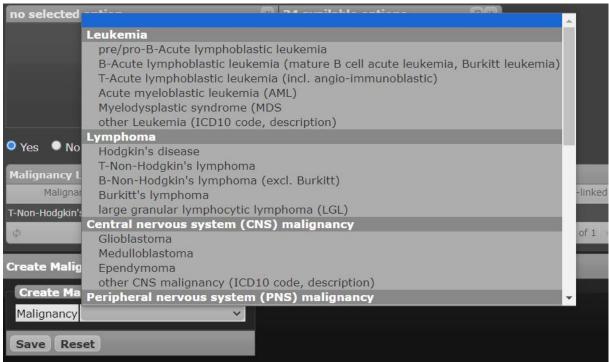


Fig 6-6: Dialogue to add more malignancies from a hierarchically ordered list or by providing ICD10 code and -text

ILD, additional TAB, not shown deprecated/under revision

HSCT, additional fields inline for SCETIDE ID and EMBT ID, Additional Tab for more detailed information on HSCT

| (HSC | natopoietic stem cell transplantation CT): es | Indicate whether haematopoietic stem cell transplantation (HSCT) has ever been performed in this patient. HSCT Yes No Currently unk. Truly unk. |
|--------|---|--|
| If yes | s, SCETIDE ID: EBMT ID: | If the patient has been reported to SCETIDE, provide the ID number. SCETIDE is the registry for Stem Cell Transplants for primary Immune Deficiencies in Europe, in collaboration with ESID. Contact info.scetide@nck.aphp.fr for more information. If the patient has been reported to the EBMT Registry, provide the ID number. |
| If yes | s, enter for each transplantation: | < <several entries="" possible="">></several> |
| | Date of transplantation [Year] [Month] [Day] ☐ Date unknown | < <cannot be="" birth.="" date="" of="" previous="" the="" to="">></cannot> |

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| Type of donor MSD (Matched sibling donor) MUD (Matched unrelated donor) MMUD (Mismatched unrelated donor) Haplo-identical (parent) donor Autologous Other related donor Unknown | Indicate the type of stem cell donor. |
|--|--|
| Source of CD34 stem cells < <one of="" or="" several="">></one> | Indicate the source of the stem cells used in this HSCT. |
| | |
| bone marrow peripheral blood cord blood fetal liver | |
| unknown | |



Fig 6-7: List of haematopoietic stem cell transplantations (HSCT) and dialogue window for entering new/additional HSCT procedures

Thymus transplant, additional fields inline

| Did the patient ever have a thymus transplantation? | Yes ○ No ○ Currently unk. ○ Truly unk. |
|---|---|
| Date of thymus transplantation 🕟 | Year: Month: Day: Currently unk. Truly unk. |
| Туре | ○ cryopreserved○ fresh○ Currently unk.○ Truly unk. |

Fig 6-8: Fields for thymus transplantation

Solid organ transplantation, additional fields inline



Fig 6-9: Fields for Solid organ transplantation, List of organs freetext

Splenectomy, additional field inline

| Splenectomy | O Yes | No Currently unk. | Truly unk. | |
|-------------------------------------|-------|-------------------|----------------|------------|
| Date of Splenectomy | Year: | Month: Day: | Currently unk. | Truly unk. |
| Fig. C. 40. Fields for Onlaw automs | | | | |

Fig 6-10: Fields for Splenectomy

Gene therapy, additional TAB

| Gene therapy | Indicate whether gene therapy has ever been performed in this patient. | | | |
|--------------------------------------|--|--|--|--|
| ☐ Yes ☐ No ☐ Unknown | Gene therapy Yes No Currently unk. Truly unk. | | | |
| If yes, enter for each gene therapy: | < <several entries="" possible="">></several> | | | |
| Date of gene therapy | < <cannot be="" birth.="" date="" of="" previous="" the="" to="">></cannot> | | | |

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[Year] [Month] [Day] Enter the date when the gene therapy was initiated.



Fig 6-11: List of gene therapies and dialogue window for entering new/additional procedures

IDDA-Score: TAB is always visible, documentation optional

IDDA (immune deficiency and dysregulation activity) score, Version 2.1 as of July 2020

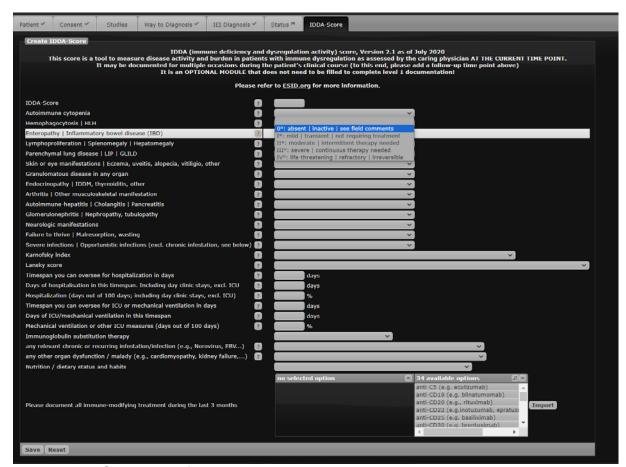


Fig 7: IDDA-Score, only for selected patients, IDDA-score may be optionally, additionally documented where suitable on documenting centres discretion.

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ANNEX A Death report form:

| Death report form | additional TAB | |
|--------------------------|------------------|--|
| Death report form | , additional LAD | |

| Current status | sed Lost to follow-up Discharged after complete recovery |
|---|--|
| Date of death: [Year] [Month] [Day] Date of death unknown | << The date of death must not be previous to the date of birth>> If day and/or month are unknown, leave these fields empty. If the date is completely unknown, select "Date of death unknown" |
| Main cause(s) leading to death: Septic shock Heart failure Respiratory failure Liver failure Renal failure Multiple organ failure Haemorrhage Thrombosis Surgical complications Surgical complications Drug toxicity Relapse of malignancy Veno-occlusive disorder Graft-versus-host Disease Rejection/Poor graft function Post-transplant lymphoproliferative disorder Other - specify: Unknown | Indicate the main cause(s) of death (several can be selected). |
| Underlying morbid setting(s) associated with mortality: Infection, specify: Malignancy, specify: Immune dysregulation, specify: Transplantation-related cause Other - specify: Unknown ICD10 Categorisation <several be="" can="" entered="">></several> | Indicate the general clincal context leading to occurrence of the death event (several can be selected). Definition of immune dysregulation: lymphoproliferation, (splenomegaly, hepatomegaly, lymphadenopathy), granuloma, autoimmunity (e.g. cytopenia, thyroid disease, joint disease, hepatitis, vitiligo, alopecia, diabetes), inflammatory bowel disease, celiac disease, vasculitis, eczema, autoinflammatory disease < <op> <<op></op></op> |
| Code: Text: | Enter at least two characters in either the code or the text field. Matching entries are presented as a list that you can select from. |

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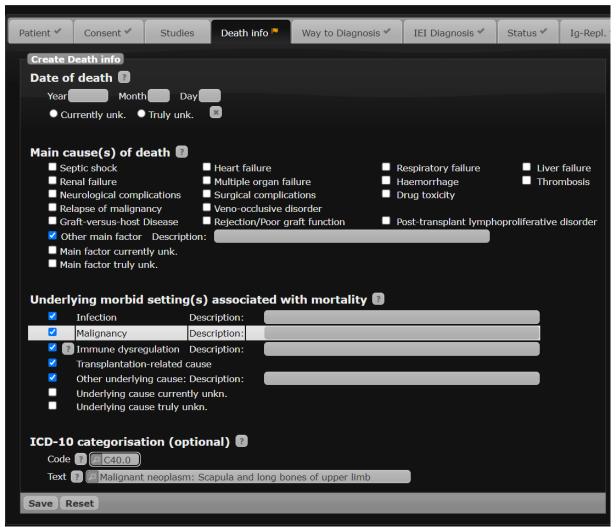


Fig 8: Death report form

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