

Cell Line Registration

Quick-Start Guide

for

**Human Pluripotent Stem Cell Registry
(hPSCreg)**



and

**European Bank for Induced Pluripotent
Stem Cells (EBiSC)**



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1 Introduction

The following is a quick-start guide to registering your cell lines for the human pluripotent stem cell registry (hPSCreg). Alternatively, you may also choose to register your line for deposition in the *European Bank of induced pluripotent Stem Cells* (EBiSC).

EBiSC is a not-for-profit iPSC banking initiative to store and distribute iPSC lines (<https://www.ebisc.org/>). For a quick overview of the EBiSC deposition steps, please refer to the document "[Information For Potential EBiSC Depositors](#)". If you chose to register your lines in EBiSC, they will also automatically be registered in hPSCreg.

The registration procedure is similar for both registries. As a very first step, please apply for access to the database (described below), as it may take one or two working days for your account to be verified.

We highly recommend that you check the list of mandatory information needed to register your cell lines before you try to navigate the data entry form. A checklist of mandatory items is located in Appendix I at the end of this document. Please note that the mandatory information needed for cell line validation are slightly different between hPSCreg and EBiSC. Cell lines registered for EBiSC will only be validated in hPSCreg if all relevant mandatory information for hPSCreg is provided. Please also note that if you do not have all of the required information on hand, you can save your data and continue entering the missing information later. New data can also be supplied at a later time point.

2 Help!

If at any time you have any questions or comments about the registration or data entry process (EBiSC or hPSCreg), please submit your requests to the contact form:

<https://hpscereg.eu/contact>

Once you have a login, you can also contact us by clicking on the "Send support mail" button on the Dashboard (see Figure 3) or in the sidebar (see Figure 10).

3 Registration

Registration is a two-step process: *Figure 1. Sign-up form*

1) Fill out the on-line form:

<https://hpscereg.eu/signup>

2) Upon filling out the on-line form and clicking "Sign Up", the system will confirm the receipt of your data (Figure 2, left). You will then be sent a verification email. If you do not receive a mail in your inbox, please check your junk mail folder. Verify your e-mail address by clicking on the provided link in the e-mail, and then you should see the confirmatory message in Figure 2, right.

Figure 2: Successful sign up and e-mail verification

4 Login and Dashboard

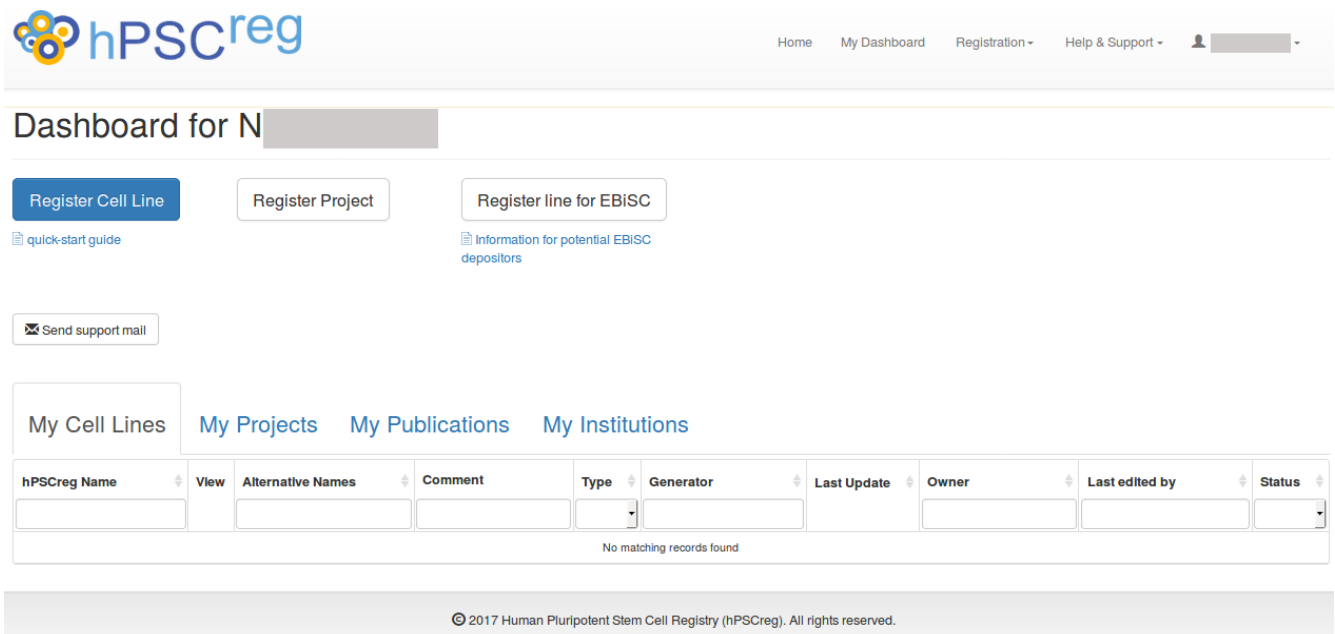
Access the registration website here:

<https://hpscreg.eu/login>

You will be directed to your "Dashboard" page (Figure 3), where you can start registering a line.

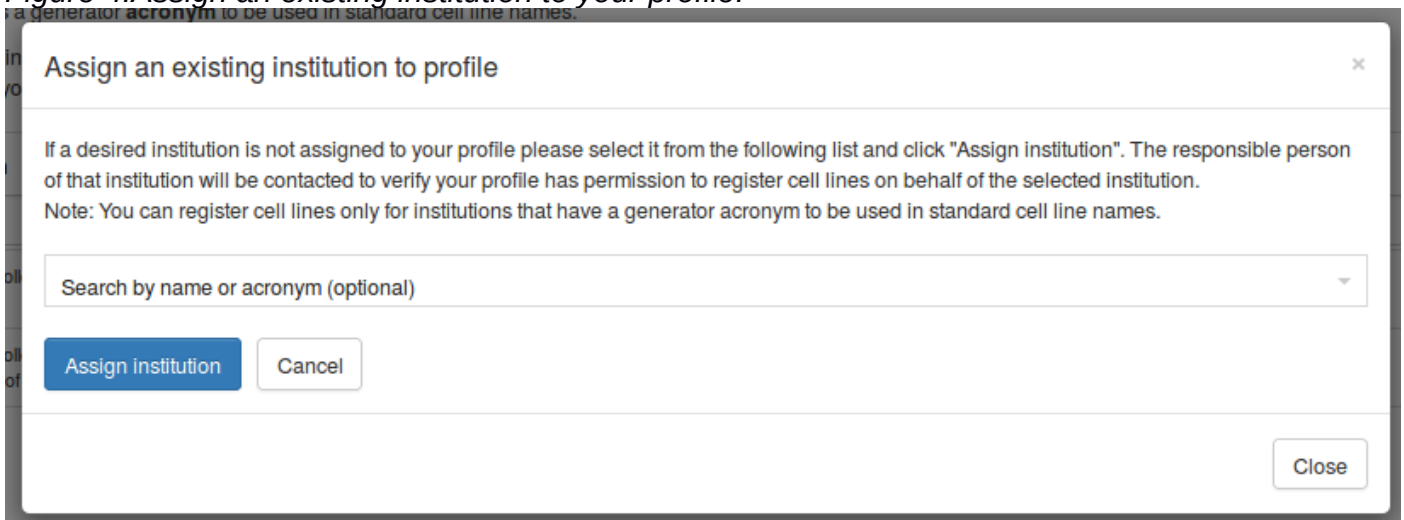
<https://hpscreg.eu/user/dashboard>

Figure 3. First-time user dashboard



As a first-time user, you will be required to associate your profile with an institution. This institution will be the generator institution of the cell lines that you register. Click on "Find and assign institution" to search for your institution in hPSCreg (Figure 4). Search for your institution in the drop-down box and select it. If you find your institution on the drop-down list, click "Assign Institution".

Figure 4. Assign an existing institution to your profile.



An automated email will be sent to the manager of the institution, who should upgrade your status from "Applicant" to "Registrant". If you do not receive an email notification within two business days, please contact hPSCreg: <http://hpscereg.eu/contact>.

However, if your institution is not in the drop-down list, you must create your institution. Click on "Register and assign new a institution" (Figure 5). Fill out all of the information fields. As you are the first the register this institution in hPSCreg, you will be the first manager of this institution. You also have the option of nominating yourself or someone else as the public contact person for this institution.

In some cases, you may wish to register lines under a sub-institution (eg. "Institute of Stem Cell Research"), which is part of the main institution (e.g. "University of Springfield"). In this case, create the main institution first (e.g. "University of Springfield"). Then click "Register and assign a new institute" again, and enter the name of the sub-institution in the name field (e.g. "Institute of Stem Cell Research") and select the main institution from the sub-institution drop-down menu (e.g. "University of Springfield"). Now you can also create a naming acronym which is specific for your sub-institution.

To summarize, users in hPSCreg have different statuses:

- **Applicant:** a user that requests to be associated with an existing institution, for the purposes of registering cell lines.
- **Registrant:** a user that is allowed to register cell lines for an institution.
- **Manager:** a user that has the responsibility to approve "Applicants" to become "Registrants" for the institution s/he is managing. Managers are also allowed to register lines and change the contact data of the institutions that they manage. There may be multiple managers for each institute. If a user registers a new institute for the first time, this user becomes a "Manager" of this institution by default.

Figure 5. Register a new institution in hPSCreg.

Register a new institution in hPSCreg and assign to my profile ✕

General information

Name

Name of the institution

E.g. "University of Springfield". If the institution you want to register is a *subinstitution*, please select the higher-level institution in the step below and only fill in the name of the institute or department, e.g. "Institute for Stem Cell Research".

Subinstitution of

Search by name or acronym (optional)

Please select the higher-level company or institution, e.g. "University of Springfield", if your institution is a subinstitution, e.g. "Institute for Stem Cell Research" or

Acronym

Generator acronym (2-6 letters)

A generator acronym must be 2-6 letters long and will be used for hPSCreg standard cell line names. Institutions without acronym can not be used as generator.

Address information

Street / No.

Street & number

Public contact person responsible for cell line registrations

hPSCreg needs a contact person assigned to your institution who is shown publicly. You can

- use your own hPSCreg user account as responsible contact for cell line registrations on behalf of your institution
- provide an email address of an existing hPSCreg user responsible for cell line registrations on behalf of your institution
- provide email address, name, phone and fax of a responsible person, who does not have an hPSCreg account (but can sign up for a hPSCreg account at any time with the provided email address)

Use my hPSCreg user account as public contact

Your name, email address, phone and fax number will be shown publicly on hPSCreg.

Contact person email

Contact person email

[Home](#) [My Dashboard](#) [Registration](#) ▾ [Help & Support](#) ▾

Dashboard for N [redacted]

Register Cell Line

[quick-start guide](#)

Register Project

Register line for EBiSC

[Information for potential EBiSC depositors](#)

My Cell Lines
My Projects
My Publications
My Institutions

The following table shows all institutions assigned to your profile. You can only register cell lines for an institution that is assigned to your profile with status **Registrant** and if the institution has a generator **acronym** to be used in standard cell line names. If you are **Manager** for a certain institution you have permission to add/remove/change user profiles assigned to that institution. If you are not manager and you need registration access for a certain institution and your status is **Applicant**, please contact the manager of that institution.

[Find and assign institution](#)

[Register and assign a new institution](#)

Acronym	Institution	Institution data & account manager	My Role
TACO	Taco Bell Research	N [redacted]	Manager
TACL	Taco Bell Research: Stem Cell Food	N [redacted]	Manager

Showing 1 to 2 of 2 rows

5 Register a Cell Line

To register a cell line, click on "Register Cell Line".

If you want to deposit a line in EBiSC, click on "Register Cell Line for EBiSC". For a quick overview of the advantages of depositing in EBiSC, as well as the required steps for deposition, please refer to the document "[Information For Potential EBiSC Depositors](#)".

5.1 Standard Nomenclature

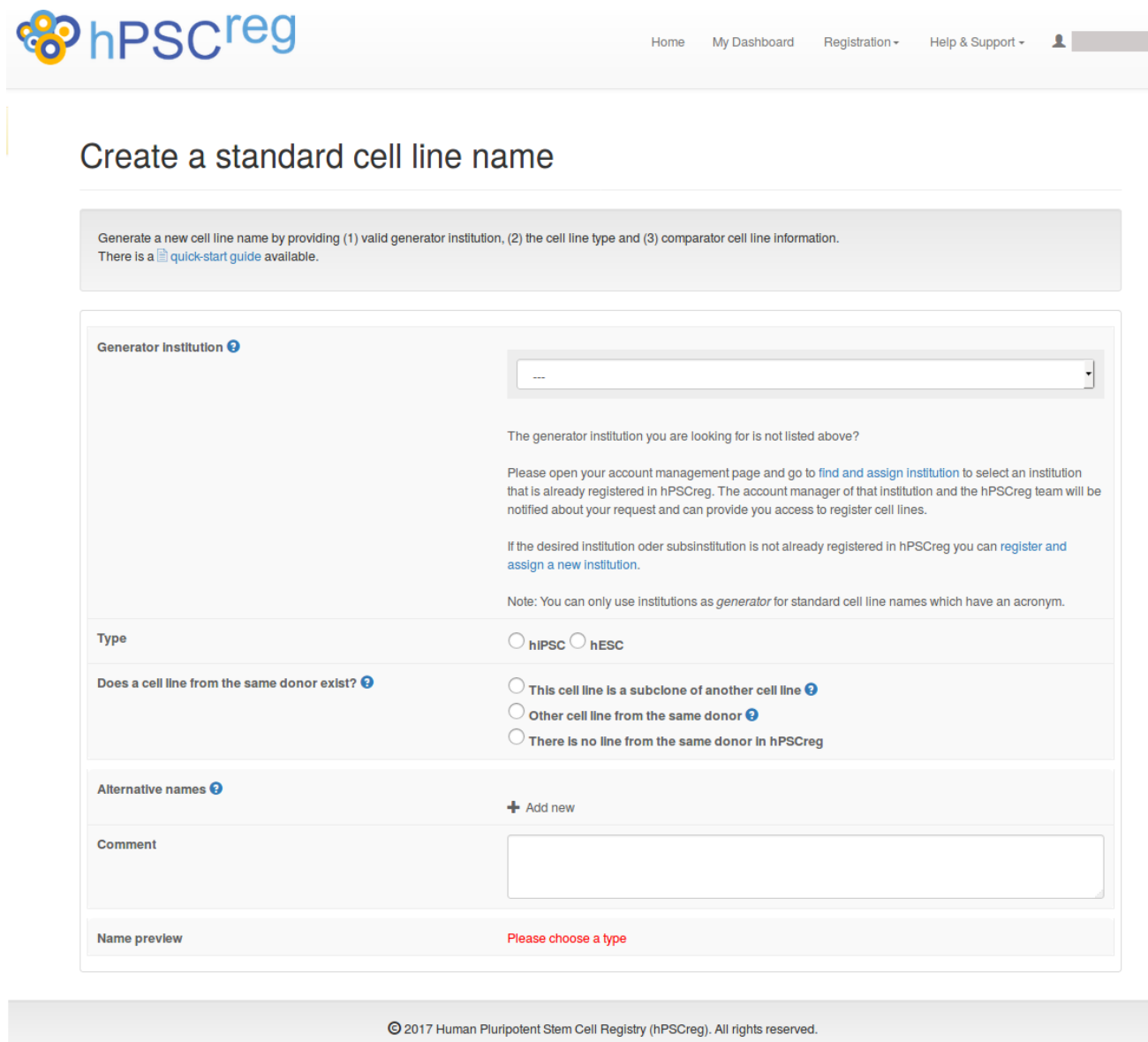
You will be directed to the page "Create a standard cell line name". The name will be generated according to the standard human PSC nomenclature (<https://hpscereg.eu/about/naming-tool>). Naming is a required first step in cell line registration.

Please fill out the following mandatory fields:

- Generator institution
- Cell line type (required for hPSCreg lines)
- Does a comparator cell line exist?

Although it is not mandatory, please feel free to enter alternative names (i.e. synonyms or other identifiers) of the cell line, as this helps in preventing duplicate registrations, as well as improving the search function to find lines by their alternative names.

Figure 7. Create a cell line name (hPSCreg)



The screenshot shows the hPSCreg website interface. At the top left is the hPSCreg logo. To the right of the logo are navigation links: Home, My Dashboard, Registration (with a dropdown arrow), and Help & Support (with a dropdown arrow). A user profile icon is visible on the far right.

Create a standard cell line name

Generate a new cell line name by providing (1) valid generator institution, (2) the cell line type and (3) comparator cell line information. There is a [quick-start guide](#) available.

Generator Institution ?

The generator institution you are looking for is not listed above?

Please open your account management page and go to [find and assign institution](#) to select an institution that is already registered in hPSCreg. The account manager of that institution and the hPSCreg team will be notified about your request and can provide you access to register cell lines.

If the desired institution or subsinstitution is not already registered in hPSCreg you can [register and assign a new institution](#).

Note: You can only use institutions as *generator* for standard cell line names which have an acronym.

Type

hPSC hESC

Does a cell line from the same donor exist? ?

This cell line is a subclone of another cell line ?

Other cell line from the same donor ?

There is no line from the same donor in hPSCreg

Alternative names ?

+ Add new

Comment

Name preview Please choose a type

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Figure 8. Create a cell line name (EBiSC)

EBiSC
European Bank for Cell Culture and Gene Therapy

Home My Dashboard Registration Help & Support

Create a standard cell line name

Generate a new cell line name by providing (1) valid generator institution, (2) the cell line type and (3) comparator cell line information. There is a [quick-start guide](#) available.

Please note that the [EBiSC Material Deposit Agreement \(MDA\)](#) has to be signed after the line has been accepted by the EBiSC consortium.

Generator Institution ?

The generator institution you are looking for is not listed above?

Please open your account management page and go to [find and assign institution](#) to select an institution that is already registered in hPSCreg. The account manager of that institution and the hPSCreg team will be notified about your request and can provide you access to register cell lines.

If the desired institution oder subsinstitution is not already registered in hPSCreg you can [register and assign a new institution](#).

Note: You can only use institutions as *generator* for standard cell line names which have an acronym.

Type ?

hiPSC

Does a cell line from the same donor exist? ?

This cell line is a subclone of another cell line ?

Other cell line from the same donor ?

There is no line from the same donor in hPSCreg

Alternative names ?

+ Add new

Comment

Name preview Please select a generator

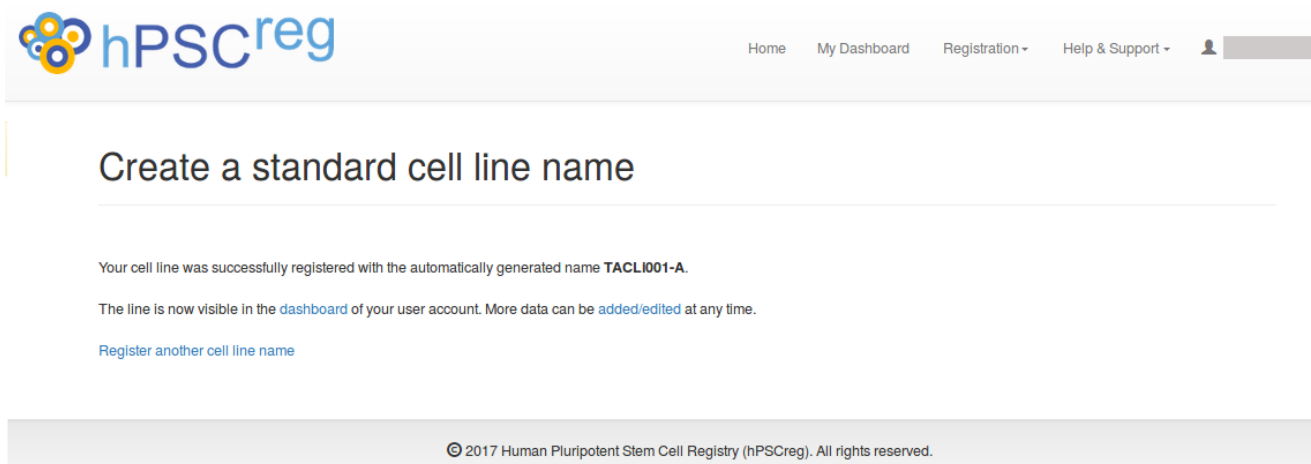
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Click "Finish" to submit the initial data. You will be asked to confirm that the initial data is correct. The system will automatically generate a standardized ID for your cell line (Figure 9).

At this point, you can register another cell line, or go to your "Dashboard" to continue adding data to the newly created line.

Once a standard name has been created, the cell line name can be found in hPSCreg. Only basic data will be displayed, such as the cell line type (hiPSC or ESC), institution that generated the line, the Biosamples ID for the cell line, and publications associated with the cell line, if any have been entered.

Figure 9. Successful creation of a cell line name



6 Adding Data to the Cell Line

Once a cell line name has been created, you can start entering data associated with the cell line.

From your "Dashboard", select the line that you want to edit.

There are eight tabs of data that need to be filled out:

- General Information
- Donor Information
- Ethics/Usage
- Derivation
- Culture Conditions
- Characterisation
- Genotyping
- Genetic Modification

For an overview of the fields that are mandatory for registration, please consult the **Appendix I** at the end of this document.

Please save your data during the data entry process (e.g. after filling out one whole tab) by clicking "Save cell line" in sidebar on the left-hand side of the form (Figure 10). Make sure you save your data before leaving the editing page, as most data will be lost without clicking "Save cell line". You do not have to enter all of the data in one session.

Please note that if there are mandatory fields that have been left empty, you will not be allowed to submit the cell line for validation.

Missing information that is not mandatory can be entered later on.

Figure 10. Entering data for the cell line: don't forget to save!

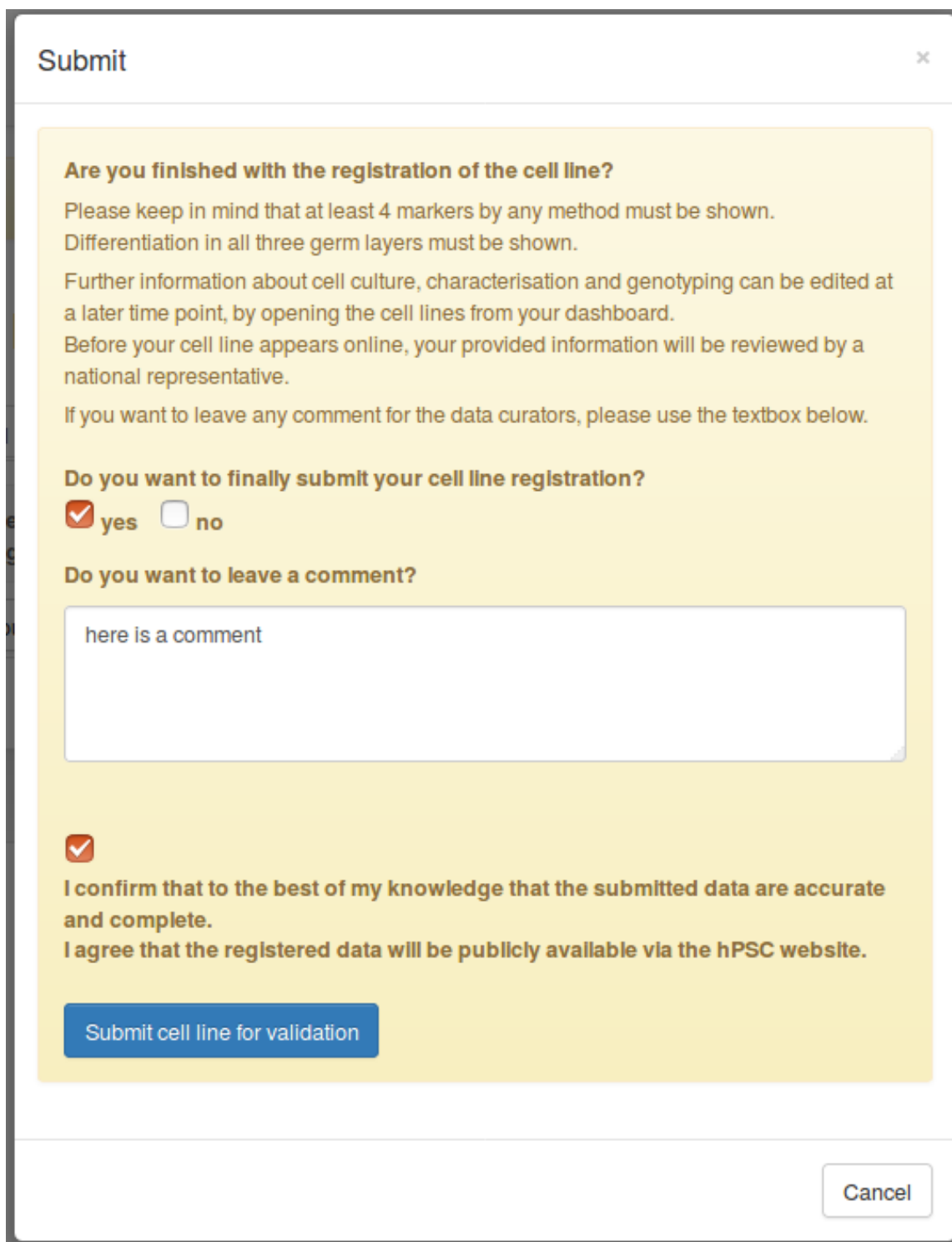
The screenshot shows the hPSCreg website interface for editing a cell line. The main heading is "Edit hPSCreg cell line TACLi001-A". The page is divided into several tabs: General Information, Donor Information, Ethics/Usage, Derivation, Culture Conditions, Characterisation, Genotyping, and Genetic Modification. The "General Information" tab is active, showing fields for "Status" (Unsubmitted), "Registrant", "Registration date" (2017-10-18 11:48:34 by N...), and "Hold date" (Set hold date). There are "Withdraw" and "Submit" buttons. Below this, there are text areas for "Comment for editors/validators" and "Public notes".

On the left sidebar, there is a "Save cell line" button circled in red, with a red text overlay "Save your data!" below it. Other sidebar options include "Send support mail", "Show public view", "Show history", and "Check Mandatory".

The "Provider" section shows the "Generator Institution" as "Stem Cell Food (TACL)" and a dropdown for "Contact institution or department". A note below states: "If the desired institution oder subsitution is not already registered in hPSCreg you can go to your account management page and register and assign a new institution."

Once you have reached the "Genetic Modification" tab, click "Finish" to submit the cell line for validation. You will be asked to confirm the submission, and if there are any comments that you would like to make, you can enter them in the text field (Figure 11).

Figure 11. Submit the cell line for validation



Submit ×

Are you finished with the registration of the cell line?

Please keep in mind that at least 4 markers by any method must be shown.
Differentiation in all three germ layers must be shown.

Further information about cell culture, characterisation and genotyping can be edited at a later time point, by opening the cell lines from your dashboard.
Before your cell line appears online, your provided information will be reviewed by a national representative.

If you want to leave any comment for the data curators, please use the textbox below.

Do you want to finally submit your cell line registration?
 yes no

Do you want to leave a comment?

here is a comment

I confirm that to the best of my knowledge that the submitted data are accurate and complete.
I agree that the registered data will be publicly available via the hPSC website.

Submit cell line for validation

Cancel

Click on "Submit cell line for validation". If some of the mandatory fields have not been filled out, you will be prompted to enter the missing information.

Please note that the mandatory fields must be filled before your cell line can be successfully submitted.

Once the cell line submission is successful, most of the cell line data will be publicly visible in hPSCreg. Additionally, the cell line will be validated by the National Representative and you will receive a confirmation by e-mail.

7 Cell Line Certificates

If you would like to obtain a certificate for your validated cell line, please send a request to us through the contact form:

<https://hpscereg.eu/contact>

8 Appendix

Appendix I. Mandatory information for cell line registration

The following tables, grouped by the tabs in the entry form, indicate which information is mandatory for which cell lines (hESC, hiPSC) and which databases (EBiSC or hPSCreg). Short descriptions are provided for additional clarification.

General Information Tab: all cell lines

Field	Mandatory Information		Short description or help text
	EBiSC	hPSCreg	
*Cell line type	yes	yes	hESCreg contains both hiPSC or hESC, whereas EBiSC only has hiPSC lines.
Cell line name			A systematic name will be automatically be assigned upon cell line creation.
*Generator institution	yes	yes	Name of institution that generated the cell line
* Biosamples ID	yes	yes	Does a Biosamples ID (https://www.ebi.ac.uk/biosamples/) for this cell line exist? Some IDs might already exist, like for HipSci lines. If a Biosamples ID exists, please enter the ID here. If you are not sure, please click on the button "Create" to display a pop-up menu. Then search the Biosamples database to check by clicking on "Biosamples Website". If you are certain that no Biosamples ID exists for this cell line, check the box "No Biosamples ID exists", and once you submit the cell line for validation (at the very last step of cell line submission), a Biosamples ID will be created automatically for you.
* Is the cell line available in principle?	yes	yes	Is the cell line readily obtainable for third parties?

Donor Information: all cell lines

Field	Mandatory Information		Short description or help text
	EBiSC	hPSCreg	
*Sex	yes	yes	What is the biological sex of the donor? Karyotypes containing both X and Y chromosomes are considered male. Karyotypes containing only X chromosomes are considered female.

Field	Mandatory Information		Short description or help text
	EBiSC	hPSCreg	
* Biosamples Donor ID	yes	yes	Does a Biosamples ID (https://www.ebi.ac.uk/biosamples/) for this donor exist? Some IDs might already exist, like for HipSci lines. If a Biosamples ID exists for the donor, please enter the ID here. If you are not sure, please click on the button "Create" to display a pop-up menu. Then search the Biosamples database to check by clicking on "Biosamples Website". If you are certain that no Biosamples ID exists for this donor, check the box "No Biosamples ID exists", and once you submit the cell line for validation (at the very last step of cell line submission), a Biosamples Donor ID will be created automatically for you.
* Is there a disease diagnosed?	yes	yes	Has the donor been diagnosed with a disease?

Ethics Tab: hESC lines only

Field	Mandatory Information		Short description or help text
	EBiSC	hPSCreg	
* Has institutional review board approval/competent authority approval been obtained for derivation of the ESC line?	NA	yes	
* Has consent been obtained from the donor of the embryo from which ESC cells have been made?	NA	yes	
* Have both parents consented to the use of the embryo for ESC derivation?	NA	yes	
* Does consent expressly permit derivation of ES cells?	NA	yes	
* Was the embryo established purely for research purposes?	NA	yes	
* Please confirm that no pressure was put on the donor at any stage of donation	NA	yes	The answer is yes if the donation of the material was free and voluntary.

Field	Mandatory Information		Short description or help text
	EBiSC	hPSCreg	
* Please confirm that no financial inducement was offered to donation at any stage	NA	yes	The answer is yes if no inducing payment was offered for the donation of the material. Reimbursement of incurred costs (e.g. travel) and compensation for effort are excluded as long as these do not constitute undue inducement.
* Are personal data and privacy of donors of embryos for the derivation of the cells are protected?	NA	yes	
* Has the cell line been derived with the donor informed consent? Please note that without evidence for donor consent, the cell line cannot be registered. If possible, upload any other supporting documentation.	NA	yes	

Ethics Tab: hiPSC lines only

Field	Mandatory Information		Short description or help text
	EBiSC	hPSCreg	
* <u>Donor Consent Form & Donor Information Sheet</u> : Has consent been obtained from the donor of the tissue from which iPS cells have been derived?	yes	yes	The informed consent of a donor of biomaterial provides ethical validation of the provenance of any cell line generated from it, and must be in place before the cell line can be released to the public. If the derivator of the cell line obtained the originating cells or tissue from a commercial vendor, cell bank or other third party, details of the donor consent must be obtained from this third party.
* <u>Donor Consent Form & Donor Information Sheet</u> : Was the consent voluntarily given by the donor, custodian or parents?	no	yes	A donation is "voluntarily" given if the donor, custodian or parents have not been subject to duress, coercion or inducement. The decision - to accept or decline donation - will have no effect on the medical treatment or other benefit that s/he will receive.
* <u>Donor Consent Form & Donor Information Sheet</u> : Has the donor been informed that participation will not directly influence their personal treatment?	no	yes	The donor should be advised that participation in a study or otherwise donating tissue will not affect his or her medical care.

Field	Mandatory Information		Short description or help text
	EBiSC	hPSCreg	
* <u>Donor Consent Form & Donor Information Sheet</u> : Can you provide us with a copy of the Donor Information Sheet provided to the donor?	yes	yes	The document contains the information provided to the donor during the consenting process, before consent is given by the donor. The information usually includes explanations about the purpose of the donation, risks and benefits, what will be done with the samples and data protection issues. Please upload the original consent information sheet, without any personal identifiers. If available, please also upload a copy in English in addition to the original. In the case where the primary cell was obtained from a third party, please obtain the consent information from this third party and upload. Alternatively, please provide contact information of these third parties. It should be noted that the consent information sheet will not be publicly visible. It will only be used by hPSCreg for cell line validation and certification purposes.
* <u>Donor Consent Form & Donor Information Sheet</u> : Do you (Depositor/Provider) hold a copy of the SIGNED Donor Consent Form?	yes	yes	This refers to the form, which was signed by the donor to document consent (this is not the consent information sheet requested before). Only blank templates or anonymised consent forms must be uploaded here. No personal identifier of the donor should be deducible. In the case where the primary cell was obtained from a third party, please obtain the consent form from this third party and upload. Alternatively, please provide contact information of these third parties. It should be noted that the consent document will not be publicly visible. It will only be used by hPSCreg for cell line validation and certification purposes.
* <u>Donor Consent Form & Donor Information Sheet</u> : Is there other documentation provided to the donor for consenting purposes?	yes	no	Cartoons, recordings, assent/dissent information for children or adults unable to provide consent (surrogate decision).
* <u>Donor Consent Form & Donor Information Sheet</u> : Confirm that consent was obtained by a qualified professional	yes	no	

Field	Mandatory Information		Short description or help text
	EBiSC	hPSCreg	
* <u>Donor Consent Form & Donor Information Sheet</u> : Please indicate whether the donated material has been pseudonymised or anonymised.	yes	yes	This question relates to the type of data protection applied to the biosample. "Pseudonymised": Identification of the donor is possible as a code was generated whereby the biosample/data can be linked back to the name of the donor. The key to the code can only be accessed by a restricted number of persons as described in the consent documentation. This type of coding is often referred to as "pseudonymised", but also sometimes as "linked-anonymised" or "coded". "Anonymised": Tracing the biosample or derived cells or data back to the donor is not possible when the sample has been anonymised. The sample has been coded, but there is no key linking the biosample/data to the name of the donor, so the material/data are completely anonymised or not traceable.
* <u>Permitted Uses: Research</u> : Does consent expressly prevent derivation of iPS cells?	yes	yes	
* <u>Permitted Uses: Research</u> : Does consent pertain to a specific research project?	yes	no	Has the donor consented to donation of material in the belief that it will be used in only one specific research project or study, and will not be distributed more widely or used for other purposes without further consent?
* <u>Permitted Uses: Research</u> : Does consent permit unforeseen future research, without further consent?	yes	no	Has the donor consented to future research to be performed and without requiring new consent?
* <u>Permitted Uses: Commercial Exploitation</u> : Does consent expressly prevent development of commercial products?	yes	no	Consent to research by a for-profit organisation or any other organisation might not include permission for it to develop a commercial product. This question asks whether the donor has stated a specific objection to the use of the donated material to enable the generation of products that will be sold for financial gain. If so, this restriction on use should be made apparent to any user of a cell line created from the donated tissue.
* <u>Permitted Uses: Commercial Exploitation</u> : Does consent expressly prevent financial gain from any use of the donated material, including any product made from it?	yes	no	An express prohibition on financial gain from the use or products of donated material needs to be communicated to the user of iPS cells derived from the material.

Field	Mandatory Information		Short description or help text
	EBiSC	hPSCreg	
* <u>Storage of and Access to Material</u> : Does consent prevent the DONATED BIOSAMPLE from being made available to researchers anywhere in the world?	yes	no	
* <u>Storage of and Access to Material</u> : Does consent prevent CELLS DERIVED FROM THE DONATED BIOSAMPLE from being made available to researchers anywhere in the world?	yes	yes	
* <u>Data and Information</u> : How may genetic information associated with the cell line be accessed?	yes	yes	There is now evidence to show that genetic data (including mutations, SNPs, STRs, genomics or transcriptomics data) derived from a biosample or cell line could, if used in combination with other publically available information, result in re-identification of the donor. For information about the associated risks, and options for management of access to such data, please refer to the "Ethics evaluation form" and the hESCreg "Management procedures for ethics information and risks". "Open" access means that the donor permits no restrictions on access to genetic information. "Controlled" or "managed" access requires the user to obtain prior authorisation to access genetic data, either by permission of a data access committee or through another management procedure. "No information" means that no access policy has been specified by the donor, and that hESCreg (EBiSC) will therefore treat the data as "controlled access" data. Please note: To enter genetic information associated with a cell line, please go to the tab "Genotyping" and use the relevant fields.
* <u>Benefits</u> : Will the donor expect to receive financial benefit, beyond reasonable expenses, in return for donating the biosample?	yes	yes	The answer is "NO" if no financial gain or inducing payment was offered for the donation of the biosample. Reasonable expenses refers to compensation for time and effort involved in donation, including costs incurred (eg travel expenses), as long as these do not constitute undue inducements.

Field	Mandatory Information		Short description or help text
	EBiSC	hPSCreg	
* <u>Withdrawal</u> : Does the consent permit the donor, upon withdrawal of consent, to stop the use of the derived cell line(s) that have already been created from donated samples?	yes	no	
* <u>Withdrawal</u> : Does the consent permit the donor, upon withdrawal of consent, to stop delivery or use of information and data about the donor?	yes	no	
* <u>Ethics Committee / Institutional Review Board opinion</u> : Has a favourable opinion been obtained from a research ethics committee, or other ethics review panel, in relation to the Research Protocol including the consent provisions?	yes	yes	If YES: Please provide the name of the ethics panel and approval number.
* <u>Ethics Committee / Institutional Review Board opinion</u> : Has a favourable opinion been obtained from a research ethics committee, or other ethics review panel, in relation to the PROPOSED PROJECT, involving use of donated material or derived cells?	yes	yes	If YES: Please provide the name of the ethics panel and approval number.
* <u>Third Party Obligations and other restrictions</u> : Do you have obligations to third parties in regard to the use of the cell line?	yes	no	In particular: 1. Do any third parties hold intellectual property rights in relation to the use of the cell line? 2. Does the donor consent form expressly identify any restriction on use not already mentioned?
* <u>Third Party Obligations and other restrictions</u> : Are you aware of any further constraints on the use of the donated material or derived cells?	yes	no	

Derivation Tab: hESC lines only

Field	Mandatory Information		Short description or help text
	EBiSC	hESCreg	
* Date of derivation	NA	yes	On which date has the cell line been generated (the cells isolated from the embryo)? As the handling of hESC lines is restricted for cells before a certain derivation date in some countries, this information might be crucial.
* Supernumerary embryos from IVF treatment?	NA	yes	Have the embryos been supernumerary from in vitro fertilisation (IVF) treatment?
* PGD Embryo	NA	yes	Has the cell line been derived from a preimplantation genetic diagnostic embryo?

Derivation Tab: hiPSC lines only

Field	Mandatory Information		Short description or help text
	EBiSC	hESCreg	
* Primary cell type: * Name	yes	yes	Which primary cell type has been used for reprogramming? Please use the "find cell type" button to search for a cell type. Select the most relevant result. Alternatively an ontology id can be provided as full purl/iri or short_name like FMA_63877.
* Vector type	yes	yes	If a vector has been used for reprogramming, please specify the kind of vector construct used. For non-vector based reprogramming methods please go to the section "Type of used vector free reprogramming factor(s)".

Culture Conditions Tab: all cell lines

Field	Mandatory Information		Short description or help text
	EBiSC	hESCreg	
* Medium	yes	yes	Which medium has been used? Please select if a standard, commercially available medium has been used or a self-made one. Please provide details about the composition and/or any supplements.

Characterisation: all cell lines

Field	Mandatory Information		Short description or help text
	EBiSC	hESCreg	
Undifferentiated cells	yes	yes	The expression of at least 4 different markers (by any of the following methods: immuno/marker staining, RT-PCR, FACS) to demonstrate undifferentiated status must be shown.
Differentiation potential	no	yes	Differentiation into all three germ layers must be shown.

Genotyping: all cell lines

Field	Mandatory Information		Short description or help text
	EBiSC	hESCreg	
*Has the cellline karyotype been analysed?	yes	yes	Has a karyotype been produced for the cell line? If yes, please enter the passage number of the cells karyotyped and the karyotype. You can also upload a karyogram. If the karyotyping has been performed several times, without any changes of the karyotype, please enter only the results of the highest passage tested. If a change occurred in the karyotype of the cells made available to researchers, then that karyotype should be reported. Sublines with different karyotypes should be submitted as different subclones of the original line.
*STR/Fingerprinting	yes	yes	Have short tandem repeats (STR) or the fingerprint of the cell line been analysed?
*Is the cell line genetically modified (other than for reprogramming)?	yes	yes	Here, genetic modifications refer to any modifications to the pluripotent cell lines, other than changes due to reprogramming. Typically, genetic modifications include engineered changes such as gene editing or introduction of a reporter gene construct.