



# Progeny 10

## Patients view Quick Start Guide

This quick start guide will allow users to follow a list of topics to learn how to use Progeny Clinical application through your web browser.

The Table of Contents below are hyperlinks to the topics within this document.

## Table of Contents

Progeny 10 New Features .....	
Getting Started .....	
Login .....	
Patients Dashboard .....	
Create New Patient .....	
Invite a Patient to Fill Out a Questionnaire .....	
Patient Invite Status .....	
Actions Menu .....	
Review and Edit Pedigrees and Individuals .....	
Pedigree Viewer .....	
Pedigree .....	
Individual Datasheet .....	
Cancer Risk Assessment Tool .....	
Order Genetic Testing .....	
Order Status – Genetic Testing Results .....	
Patient Letter Generator .....	
Spreadsheets and Queries .....	

# Progeny 10 – New Features

## LETTER GENERATION

Create letter templates that include database fields and quickly generate letters, notes and reports for any patient.

## PROGENY APP

Use our free iPad application to access your database allowing more flexible and personal contact with your patients.

## EMR HYPERLINK

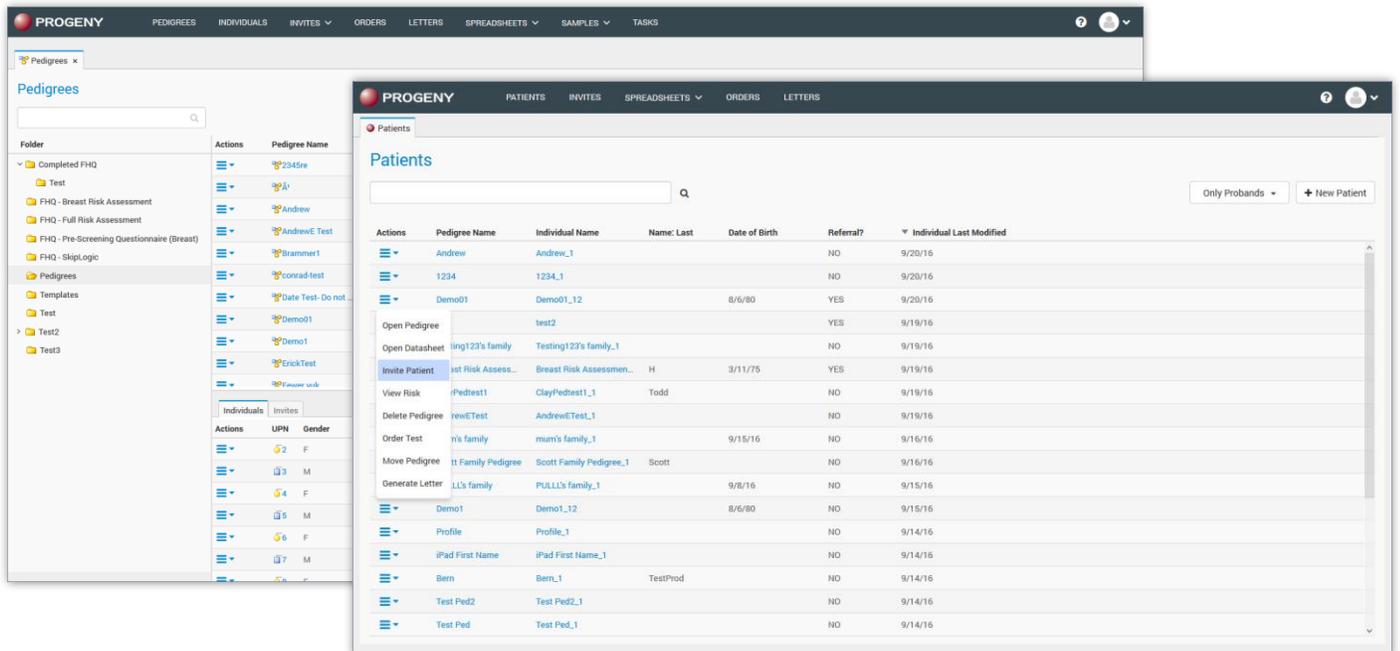
Embedding a Pedigree Hyperlink in a Patient's Record

## NEW INTERFACE DESIGN

Our updated modern design looks great and makes it easier and more intuitive to navigate.

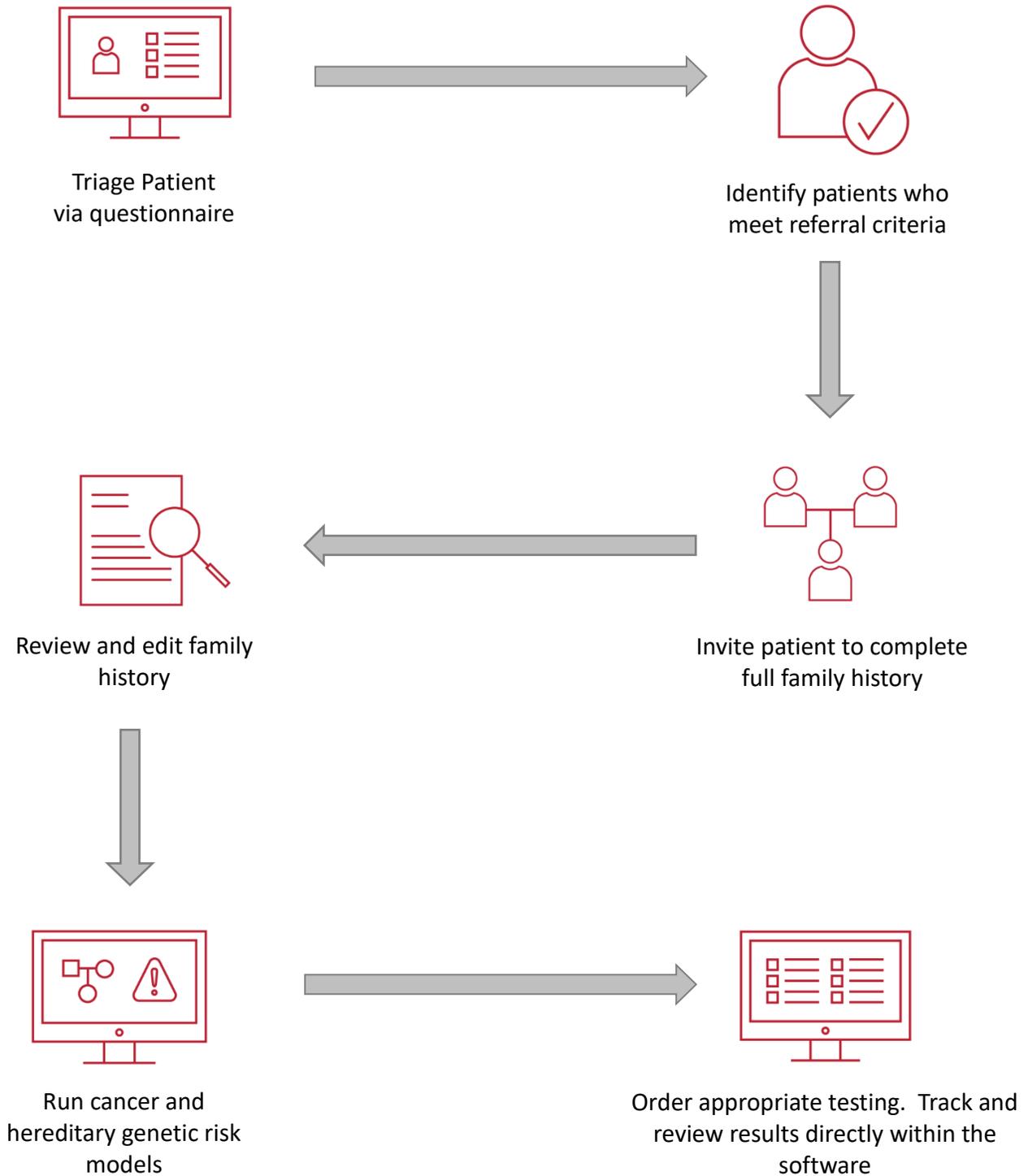
## SPEED

Upgraded database engine provides faster and more reliable performance.



Progeny 10 has a new look and feel – making it easier for you to read, find and navigate screens.

# IDENTIFYING AT RISK PATIENTS



# Let's get started!

## Trial user?

Open your web browser and go to <http://cloudtrial.progenygenetics.com>

Use your provided credentials to log in. Default password is set to **Cloud2016** you will be prompted to change this at your first login. During your first log in, please be sure to update your profile with first name, last name, and email address.

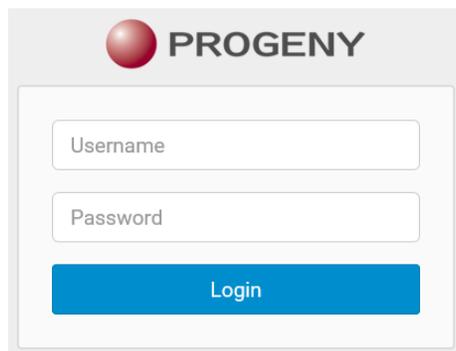
### Keep in mind!

This profile information will be required for support and unlocking accounts after unsuccessful logins. All password resets will be sent to the email stored in this profile. If this information is not entered, the account will remain locked and you will need to create a new account.

## Already Have an Account?

The login URL, username and password should be provided to you by your Progeny administrator

## Login Screen



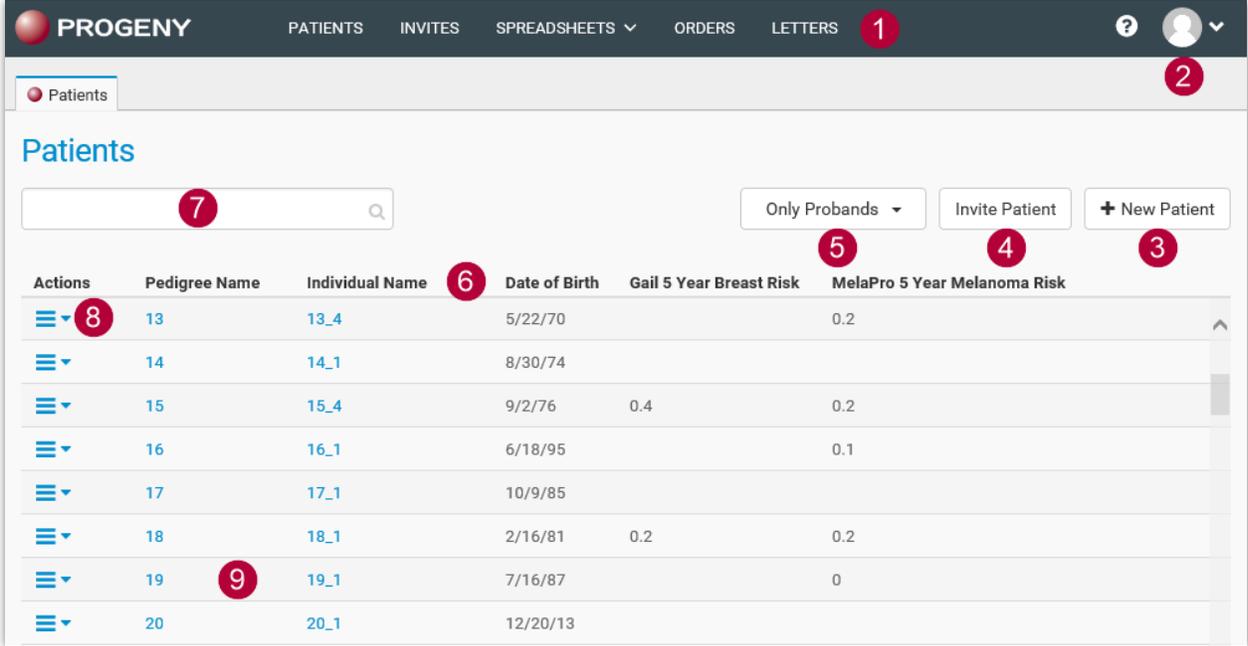
Fill in your **Username** and **Password**

If you have more than 1 database,  
use the dropdown to choose your database

## Need Immediate Assistance?

Contact support [support@progenygenetics.com](mailto:support@progenygenetics.com) or call **1-800-PROGENY**

# Patients Dashboard



## Patient Dashboard Navigation

- 1. MAIN MENU NAVIGATION
- 2. VIEW/EDIT YOUR PROFILE
- 3. CREATE NEW PATIENT
- 4. INVITE NEW PATIENT TO FAMILY HISTORY QUESTIONNAIRE
- 5. DISPLAY ONLY PROBANDS OR ALL INDIVIDUALS?
- 6. SMART LISTS
- 7. SMART SEARCH
- 8. PATIENTS ACTION MENU
- 9. REVIEW PEDIGREE OR INDIVIDUAL

## 1. MAIN MENU NAVIGATION

This menu is always accessible to you for fast multi-tasking access



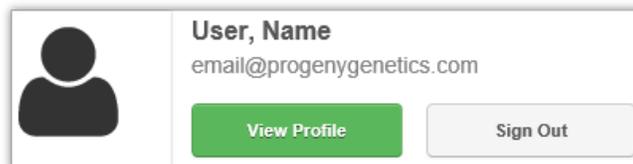
## 2. VIEW/EDIT YOUR PROFILE

### View/Edit Profile

Located at the top right hand side of the Patients screen.

These buttons are part of the top **TOOL BAR**. Details below.

### View and/or Sign Out of user Profile



**View/Edit Profile** first and last name, email, photo and change password here

The image shows a screenshot of the "View/Edit Profile" form. The form has a title bar that says "View/Edit Profile" and a close button. Below the title bar is a section for the user's name, with a label "Name, User" and a text input field containing "ebg". To the right of the name field is a "Save" button. Below the name field are three text input fields: "First Name" with "User", "Last Name" with "Name", and "Email" with "email@progenygenetics.com". Below these fields is a section for the user's photo, with a label "Current Photo" and a "Upload New Photo" section. The "Current Photo" section shows a black silhouette of a person's head and shoulders. The "Upload New Photo" section has a "Browse..." button. Below the photo section is a section for changing the password, with a checkbox labeled "Change Password" and three text input fields: "Old Password", "New Password", and "Confirm Password".

**Help** button loads the user guides webpage

(<http://www.progenygenetics.com/software/client/userguides>)

### 3. CREATE NEW PATIENT

#### Adding a new patient and creating the Pedigree

Click the +New Patient button at the top right of the screen to open a new patient builder wizard, then follow the steps to design a Pedigree for the Proband patient.

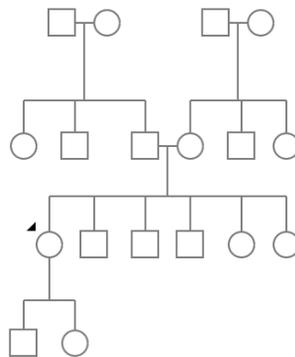
1. Adding a New Pedigree
  - a. Choose your folder where the pedigree is saved  
Note: the folder may be pre-selected or grayed out due to security permissions on your user account
  - b. Give the Pedigree a name
2. Choose the Gender of the Proband and click next to build the rest of the family
3. Click the Draw Now button to manually draw the family members, or click next and add all family members via relatives table for quick entry. Click next to construct the Pedigree.

Below is a built Pedigree image of the process described above.

The screenshot shows two panels of the 'Add New Pedigree' wizard. The left panel has fields for 'Folder Name' (set to 'Pedigrees'), 'Pedigree Name' (set to 'Smith Family'), and 'Gender' (set to 'Female'). The right panel is titled 'Enter the number for each Proband relative' and contains a table with the following data:

Relative	Count
Brothers	3
Sisters	2
Sons	1
Daughters	1
Paternal Uncles	1
Paternal Aunts	1
Maternal Uncles	1
Maternal Aunts	1

A red arrow points from the 'Next' button in the left panel to the 'Next' button in the right panel.



**Congratulations! You've just successfully created a Pedigree using Progeny!**

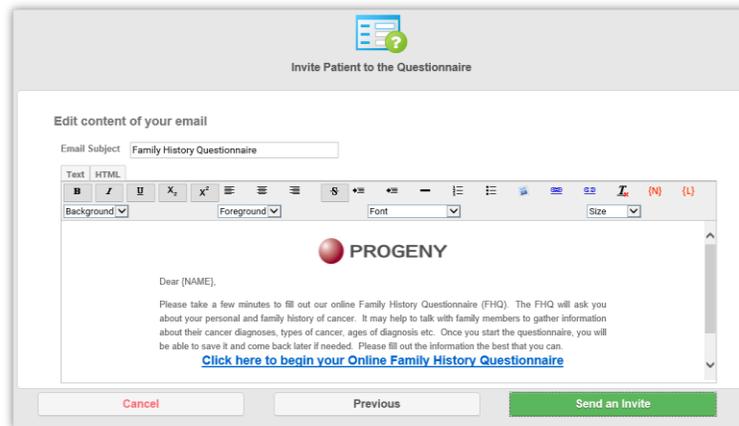
Note, the Pedigree will open by default with the Proband selected and split-screen with the datasheet for the individual. More details on the full Pedigree Viewer are described in sections below.

## 4. INVITE NEW PATIENT TO FAMILY HISTORY QUESTIONNAIRE

Progeny helps the clinicians to send invitations to patients via email or link

### INVITE NEW PATIENT

Sending a questionnaire to a new patient



An automated way to have your patients fill out their own Family History Questionnaires on their own time, then submit the Pedigree information directly to your database.

1. From the Patients screen, click Invite Patient button to begin the new patient invitation
2. Choose to Invite new Patient
  - a. This quick start only covers invitations for New Patients, not existing patients in the database
3. Select a Questionnaire you want to send the patient invitation to
  - a. Breast Risk Assessment
  - b. Full Risk Assessment
  - c. Pre-Screening
4. Choose the Folder Name where the Pedigree will be saved
5. Give your patient a Family Name (pedigree name)
6. Choose the Gender of the Proband for this family
7. Enter an Email address for the recipient (Proband) who will be filling out the questionnaire
8. Edit the content of your email if necessary
9. Send Invite to Patient

## CHECK PATIENT INVITE STATUS

Steps below describe how to check the status of your sent Family History Questionnaire invitations

The screenshot shows the PROGENY INVITES interface. At the top, the navigation bar includes PATIENTS, INVITES (marked with a red 'A'), SPREADSHEETS, ORDERS, and LETTERS. Below the navigation bar, there are tabs for Patients and Invite Status (marked with a red 'B'). The main area is divided into three filter sections: 'Select Questionnaire' (with 'Full Risk Assessment' selected), 'Invite Status' (with 'Invite Sent' selected), and 'Invited By' (with 'progeny' selected). To the right, there are three dropdown menus for 'Invited Within', 'Started Within', and 'Completed Within', all set to 'No Filter'. Below the filters is a search bar, a '18 rows' indicator, a 'Clear Query' button, a 'Query Formats' dropdown, and a '+ Invite Patient' button. At the bottom, a table displays invitation records with columns for Actions, Individual..., Questionna..., Invite Status, Web User ID, Date Invited, Date Started, Date Comp..., Invited By, and Invite Type. A red 'C' is placed over the Actions column of the first row.

Actions	Individual...	Questionna...	Invite Status	Web User ID	Date Invited	Date Started	Date Comp...	Invited By	Invite Type
 C	Smith Fami...	Full Risk As...	Sent		5/20/16			progeny	Family
	Smith4 Fa...	Full Risk As...	Sent	ecardona@...	5/20/16	5/20/16	5/20/16	progeny	Family
	Smith Fami...	Full Risk As...	Completed	ecardona1...	6/1/16	6/1/16	6/1/16	progeny	Family
	Smith Fami...	Full Risk As...	Completed	ecardona1...	6/8/16	6/8/16	6/8/16	progeny	Family

- A. Click the INVITES button at the Top Menu Navigation pane to open the Invite screen
- B. INVITATION FILTERS are used to filter the view of the exact invitations you want to see  
**You can filter by:**
  - Questionnaire sent out to the patient
  - Invitation status
  - Clinician who sent the invitation
  - Time frame of the invitation
  - You can invite new patients from the Invite status screen or Query the current patients to display in a preferred view type
- C. INVITE SCREEN: **ACTIONS MENU**  
This menu allows for quick navigation from the Invite Status module and works just like the Actions Menu on the Patients Screen.

Note, the smart header columns work just like on the Patients screen and can be customized. This is a list of uniquely chosen data fields to display on the main Invites screen for quick view.

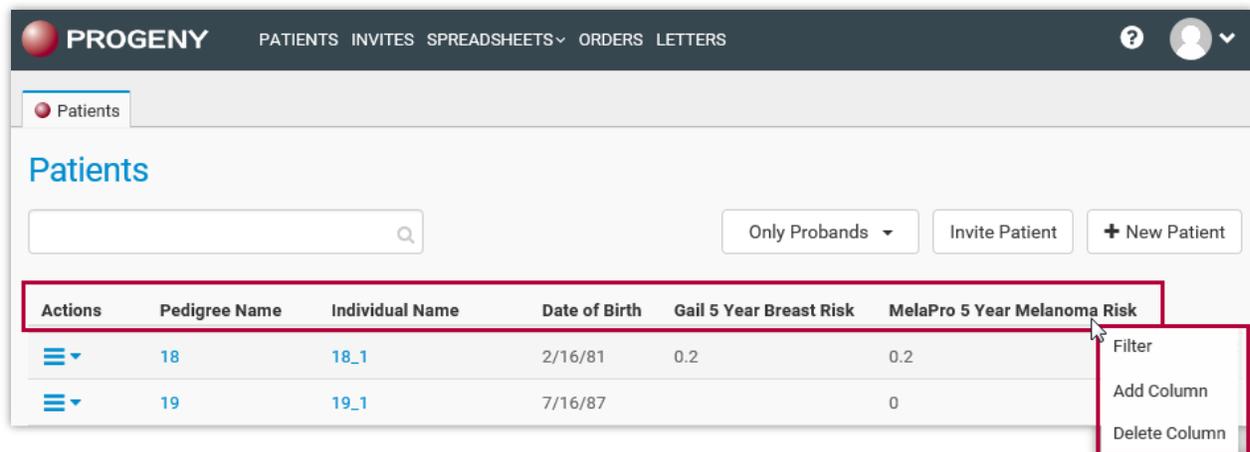
## 5. DISPLAY ONLY PROBANDS OR ALL INDIVIDUALS?

Click the dropdown option to choose to view all Individuals in the database or only the Probands.

## 6. SMART LISTS

### What is a Smart List?

A list of uniquely chosen data fields to display on the main screen for quick view. These fields are used to search the data quickly from the smart search feature. The search results only display the data found in the fields on the smart list.



The screenshot shows the Progeny Patients view. At the top, there is a navigation bar with the Progeny logo and menu items: PATIENTS, INVITES, SPREADSHEETS, ORDERS, LETTERS. Below the navigation bar, there is a search bar and three buttons: 'Only Probands' (dropdown), 'Invite Patient', and '+ New Patient'. The main content area displays a table with the following columns: Actions, Pedigree Name, Individual Name, Date of Birth, Gail 5 Year Breast Risk, and MelaPro 5 Year Melanoma Risk. The table contains two rows of data. A context menu is open over the 'MelaPro 5 Year Melanoma Risk' column, showing options: Filter, Add Column, and Delete Column.

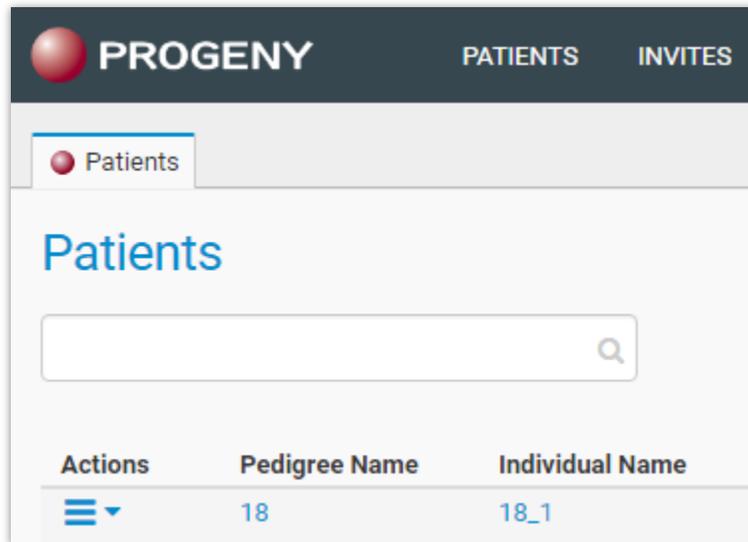
Actions	Pedigree Name	Individual Name	Date of Birth	Gail 5 Year Breast Risk	MelaPro 5 Year Melanoma Risk
☰	18	18_1	2/16/81	0.2	0.2
☰	19	19_1	7/16/87		0

- 1. Filter** – Filter the individuals by any field in the smart list by clicking on the field and choosing an arrow ascending or descending value
- 2. Add Column** – Smart list allows you to add any field within the database to this quick view list on the go
  - Right click the smart list bar area
  - Click “Add Column”
  - Choose your desired field to display
- 3. Delete Column** – Delete any column from the list. This view can be customized and applied as a default per each user.

## 7. SMART SEARCH

### What is a Smart Search?

Searches only the data that is displayed in the columns in your smart list (Smart List details). The search is limited to the exact order of the characters in the string and use the asterisk (\*) as a wildcard to extend the search.



## 8. PATIENTS ACTION MENU

Actions Menu provides quick access to functions within the application for your clinical workflow. This is located within your Patients screen.

- **Open Pedigree** – Opens the Pedigree for this Individual patient
- **Open Datasheet** – Opens the Individual Datasheet for this patient
- **Invite Patient** – Sends an invitation to a patient using the (FHQ) Family History Questionnaire module for the patient to fill out their family history and design their pedigree on their own time
- **View Risk** – Open the Risk calculations screen (BRCAPro, MMRPro, PancPro, MelaPro, Tyrer-Cuzick, Premm, Gail, Claus) associated to the selected patient
- **Delete Pedigree** – Deletes the selected Pedigree and ALL of the associated Individuals within the Pedigree. Note, deleting this is permanent, take caution with this step
- **Order Test** – Initiates the Order Test confirmation screen to place a genetic test order from Ambry Genetics
- **Move Pedigree** – Opens a prompt screen to move the selected Pedigree and all of the Individuals to a different folder directory
- **Generate Letter** – Opens the Letter Generator tool to generate custom letters for patients

## 9. REVIEW PEDIGREE OR INDIVIDUAL

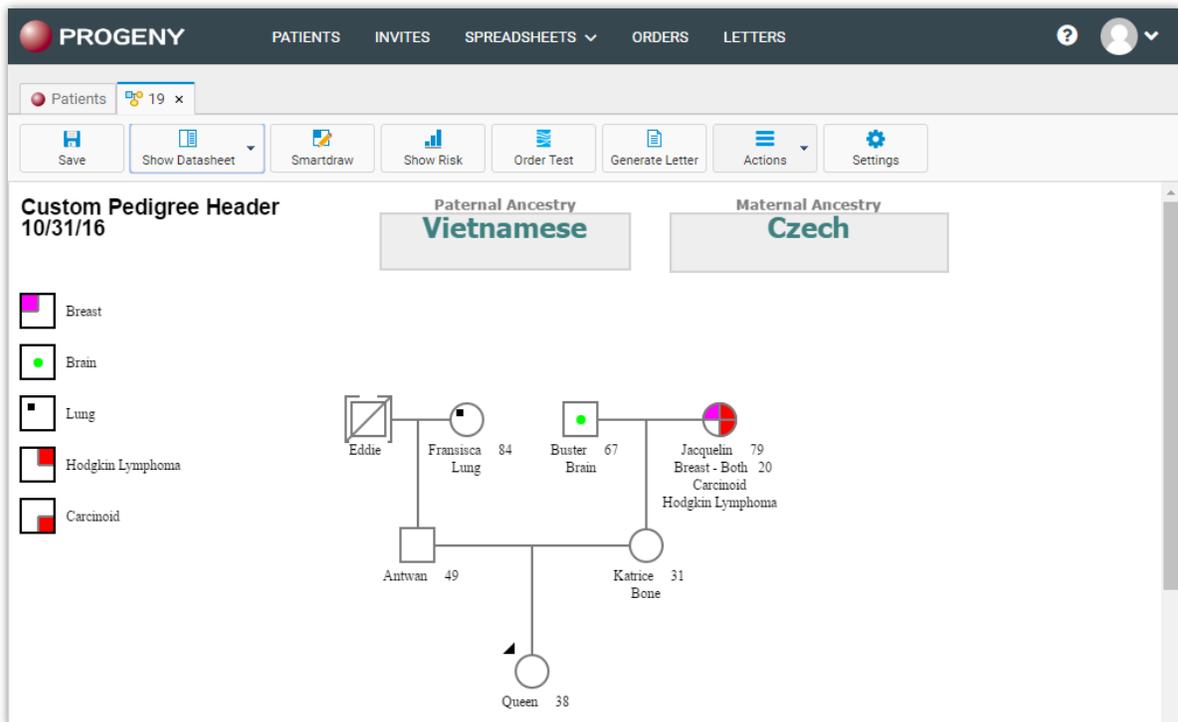
Review, edit, add, delete

Patients					
<input type="text"/>					
Only Probands ▾					
Actions	Pedigree Name	Individual Name	Date of Birth	Gail 5 Year Breast Risk	MelaPro 5 Year
☰ ▾	18	18_1	2/16/81	0.2	0.2
☰ ▾	19	19_1	7/16/87		0
☰ ▾	20	20_1	12/20/13		

Click on the Pedigree name or number to open the Pedigree or click the Individual Name/number to view the Individual Datasheet.

## Pedigree Viewer

Creating, reviewing, editing, deleting



A pedigree, also known as a genogram, is a diagram that depicts individuals who are related by blood or another factor. As shown here, we offer a few ways to build a Pedigree, and details are below.

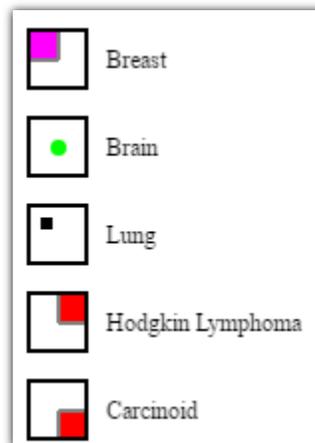
## DATA FIELDS

Data Fields that are displayed on the Pedigree are also called the Pedigree Drop Fields. The data in these fields is displayed for the Proband and can be edited via the Individual Datasheet for the Proband. Pedigree Drop Fields are very dynamic and customizable.



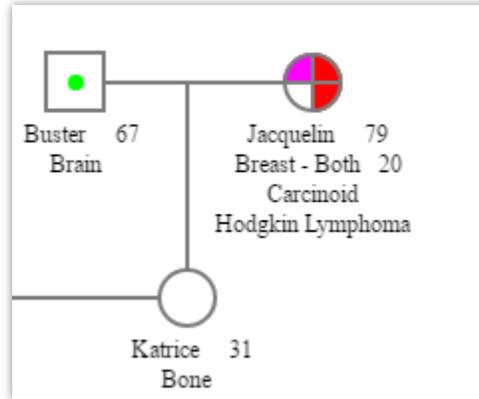
## CANCER LEGEND

This legend auto populates as you add cancers and/or other disease that are predefined with custom Pedigree symbols. Pedigree symbols can be customized and used with various data fields to display symbols on the Pedigree. To add a cancer to an Individual, see Individual Datasheet for more details.



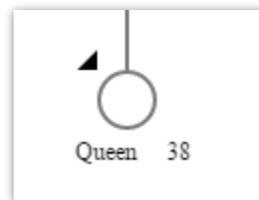
## SUBTEXT

This text is found under each Individual and can be edited via the Individual Datasheet. Subtext can be customized to display data on the Pedigree from any fields within your Individual Datasheet.



## PROBAND

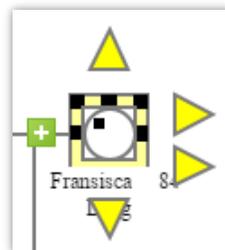
Person serving as the starting point for the genetic study of a family is the Proband and is marked with a black arrow on the Pedigree.



## QUICK BUILDER ARROWS

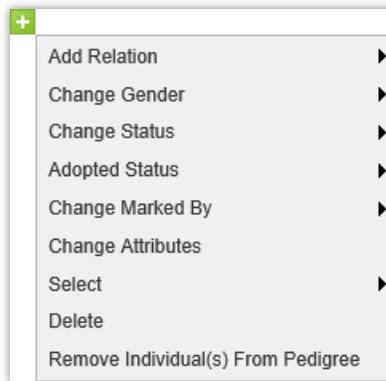
Displayed by left-clicking on an Individual.

The black squares around the Individual are for the Relationship Lines. You can click on the small black square and drag to the next individual to create the appropriate relationship. The black squares create relationships in the same order as the Yellow Arrows.



## INDIVIDUAL MENU

Displayed by right-clicking on an Individual.



**Add Relation** – Adding a relationship to the selected individual

**Change Gender** – Change the gender of the selected individual

**Change Status** – Change individual to Deceased or Alive

**Adopted Status** – Shows the adopted status of the individual

**Change Marked By** – Add an (\*) (+) (-) to the selected individual

**Change Attributes** – Change individual to be the Proband of the pedigree, No issue, Infertile, SAB, and input custom Icon Text for the individual

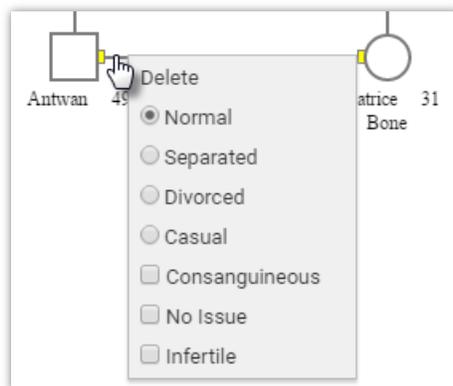
**Select** – One click selection of ALL individuals on the pedigree of the same hierarchy

**Delete** – Permanently deletes the individual from the database

**Remove Individual(s) From Pedigree** – Removes the individual from the pedigree, making the individual a singlet in the database and not associate to any pedigree

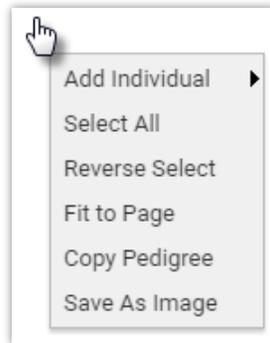
## RELATIONSHIP LINE MENU

1. Select the line between two individuals, you will see two yellow boxes on opposite sides of the line, connecting the two individuals
2. Right-click the selected line
3. Choose your menu option here

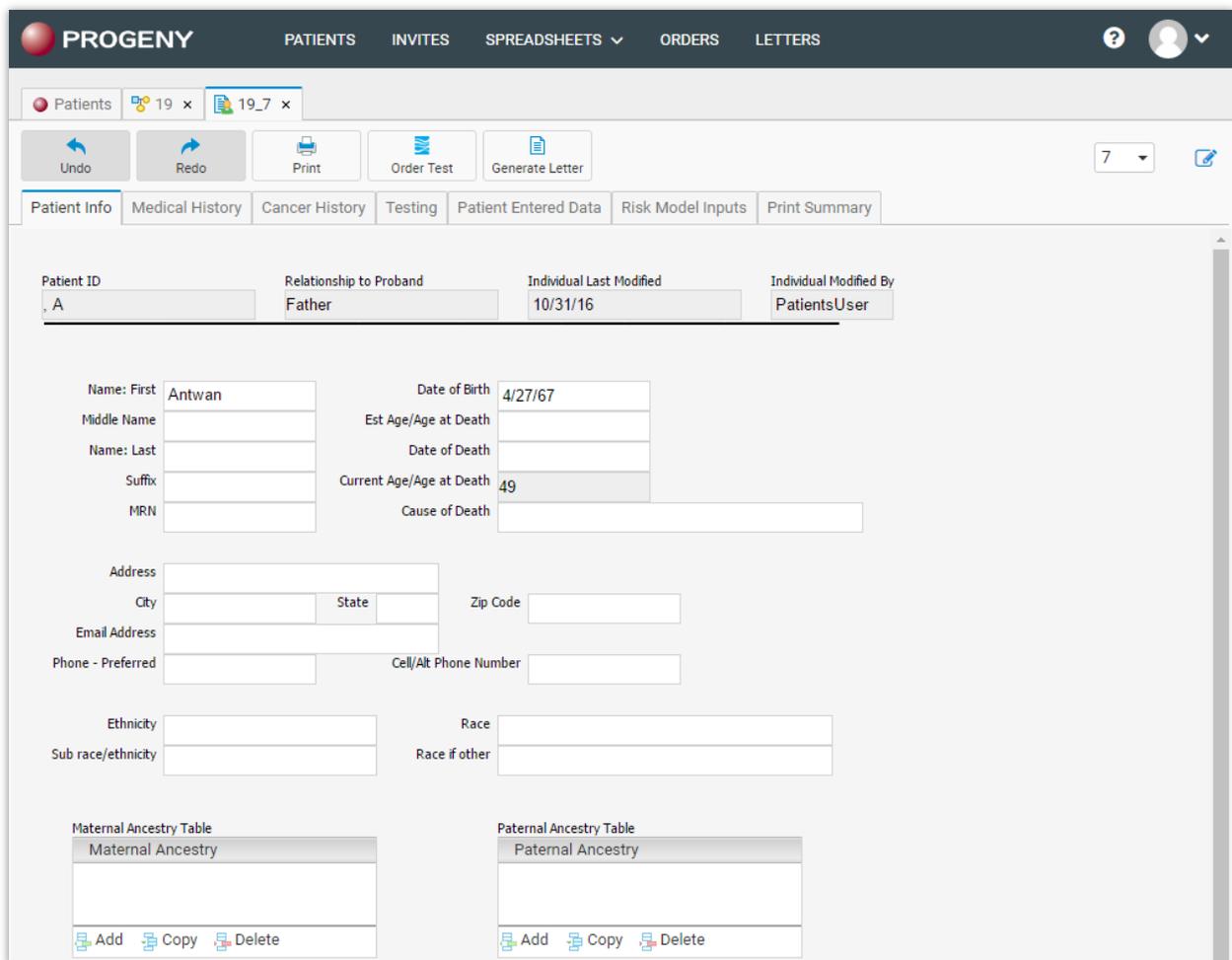


## RIGHT-CLICK MENU

Right click with your mouse anywhere on the empty space of the Pedigree screen to open the right-click menu.



## INDIVIDUAL DATASHEET



Patient ID	Relationship to Proband	Individual Last Modified	Individual Modified By
A	Father	10/31/16	PatientsUser

Name: First	Antwan	Date of Birth	4/27/67
Middle Name		Est Age/Age at Death	
Name: Last		Date of Death	
Suffix		Current Age/Age at Death	49
MRN		Cause of Death	

Address		
City	State	Zip Code
Email Address		
Phone - Preferred	Cell/Alt Phone Number	

Ethnicity	Race
Sub race/ethnicity	Race if other

Maternal Ancestry Table
Maternal Ancestry

Paternal Ancestry Table
Paternal Ancestry

Buttons: Add, Copy, Delete

The individual datasheet is used to enter and store information about individuals in the Progeny database. An Individual Datasheet can be one of many formats in your Progeny database. The datasheet is customizable to display only the data fields necessary for you.

## HOW TO ACCESS AN INDIVIDUAL DATASHEET?

1. Access by clicking on an Individual Name on the main Patients screen
2. Access from the Pedigree Viewer by clicking on Show Datasheet
3. Open the Full Datasheet screen from the Pedigree Viewer

## DATA FIELDS

The field type determines the type of data that a user can enter into the field (alphanumeric, numeric, date, and so on) or determines how the field functions in the database. For example, an image displays in the field when a user selects an image file for an image field, dropdown fields provide a custom pick list and date fields provide a date and time picker when end users are doing data entry for those field types. By default, each field type is marked with a unique icon in the application. Not all field types are available for all record levels.

**Text** - Alphanumeric characters (all digits and printable characters) up to a maximum of 32,000 characters

**Date** - M/D/YY or M/D/YYYY

**Numeric** - The digits 0-9. Negative numbers and decimals allowed

**Yes/No** - Checkbox field that holds a value of either 1 (to indicate Yes) or 0 (to indicate No)

**Dropdown** - Displays a list of pre-defined items from which the user can select one item

**Image** - Allows for the display of an image in an allowed format in the field

**Table** - The field is to be included in a table. The field does not have a pre-defined value

**Lookup Table** - The field is to be included in a table. The fields have predefined values

**Computed** - No data entry is allowed in this field. Instead, a non-editable value is displayed in the field. The value that is displayed is automatically calculated based on the expression, function, or constant assigned to the field or values that are contained in other fields

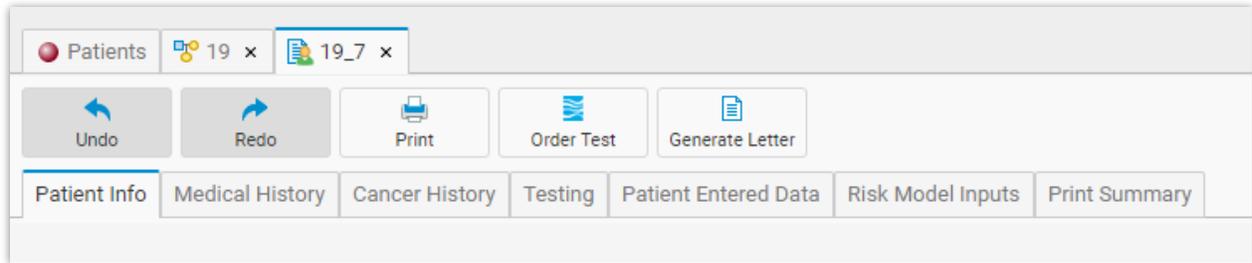
**Summary** - Provides summary information for a given column on a per pedigree basis. The summary can be an average, a total count, a minimum value, a maximum value, or a sum total

**Table Summary** - A computed field that summarizes the data for a given column in a given table

**Hyperlink** - Links to an external document, website, and so on

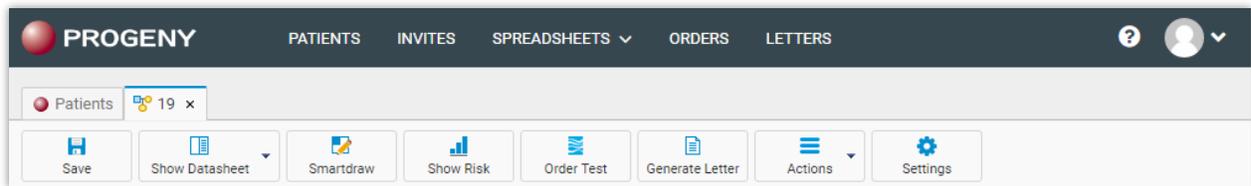
## DATA FIELDS TABS

These tabs can be customized to store any Data Fields and designed to fit comfortably with your workflow process.



## PEDIGREE TOOLBAR

Quick tools for your clinical workflow



**Save** – Save your work!

**Show Datasheet** – Quickly navigate between datasheets, spreadsheets and/or Show Invites to be displayed on the Pedigree viewer screen without having to launch a new tab

**Smartdraw** – Recognizes the preferred saved Pedigree display settings. Clicking the Smartdraw will rearrange the Pedigree to look exactly how the settings are set. This option helps to keep all Pedigrees to have the same look and feel across the database

**Show Risk** – Open the Risk Assessment tool. [Click here for more details](#)

**Order Test** – Order Genetic testing from the Progeny screen. [Click here for more details](#)

**Actions** – Quick navigation for drawing, editing the Pedigree

**Settings** – Select elements shown on Pedigrees, modify display view, and configure smartdraw settings.

# Using the Cancer Risk Assessment Tool

Did you know that you can run validated hereditary cancer risk assessment models at the touch of a button without re-entering data and generate custom queries and spreadsheets on this data?

Progeny Clinical includes validated risk assessment models to calculate 5-year and lifetime cancer risk, as well as gene mutation probabilities for any member of the pedigree. Any missing or invalid data required to run these models are automatically identified for you. Risk calculations can be easily saved and timestamped, or generated as a .pdf at any time

First, Click Show Risk button on the Pedigree Toolbar to open the risk Models screen (next page):

**PROGENY** PATIENTS INVITES SPREADSHEETS ORDERS LETTERS

Patients 19 x

Save Show Datasheet Smartdraw Hide Risk Order Test Generate Letter Actions Settings

Calculate Delete Report 2016-10-31 20:21

Validation Errors

Cancer Risk 8

BREAST	5YR	LIFE
BRCAPRO	3.6%	28.1%
CLAUS	1.0%	13.1%
TYRER-CUZICK	7.2%	43.7%
OVARIAN		
BRCAPRO	0.8%	20.7%
COLORECTAL		
MMRPRO	0.0%	3.2%
ENDOMETRIAL		
MMRPRO	0.0%	1.9%
MELANOMA		
MELAPRO	0.2%	1.9%
PANCREATIC		
PANCPRO	0.0%	1.3%

Mutation Probabilities 16

Custom Pedigree Header 10/31/16

Paternal Ancestry Vietnamese

Legend: Breast, Brain, Lung, Hodgkin Lymphoma, Carcinoid

Pedigree: Eddie, Francisca (84, Lung), Buster (67, Brain), Antwan (49), Katrice Bone, Queen (38, 3.6, 0.8, 28.1, 20.7)

## FEATURES:

- Calculate or Configure Risk – By default, opens the Risk Assessment Settings
- Delete the selected saved report from Progeny
- Date and time stamp dropdown for saved reports
- View the PDF of the selected report

## RISK ASSESSMENT RESULTS

Validation Errors <span>1</span>				Cancer Risk <span>8</span>			Mutation Probabilities <span>15</span>	
The following individuals include invalid data required to run selected risk models.				<b>BREAST</b>	<b>5YR</b>	<b>LIFE</b>	<b>BRCAPRO</b>	<b>%</b>
<b>ID#</b>	<b>FIRST NAME</b>	<b>LAST NAME</b>	<b>VALIDATION</b>	CLAUS	NA	NA	BRCA1	7.3%
1	Russ		Missing Age Skin	GAIL	1.5%	7.2%	BRCA2	0.4%
				BRCAPRO	2.4%	8.7%	ANY	7.7%
				TYRER-CUZICK	2.2%	10.5%	<b>TYRER-CUZICK</b>	
				<b>OVARIAN</b>			BRCA1	0.0%
				BRCAPRO	1.1%	3.9%	BRCA2	0.1%
				<b>COLORECTAL</b>			ANY	0.2%
				MMRPRO	0.4%	2.4%	<b>MMRPRO</b>	
				<b>ENDOMETRIAL</b>			MLH1	0.0%
				MMRPRO	0.4%	1.3%	MSH2	0.0%
				<b>MELANOMA</b>			MSH6	0.0%
				MELAPRO		Validation Error	ANY	0.1%
				<b>PANCREATIC</b>			<b>MELAPRO</b>	Validation Error
				PANCPRO	0.1%	1.0%	<b>PANCPRO</b>	
							ANY	0.6%
							<b>PREMM</b>	
							MLH1	0.3%
							MSH2	0.3%
							MSH6	0.3%
							ANY	1.0%

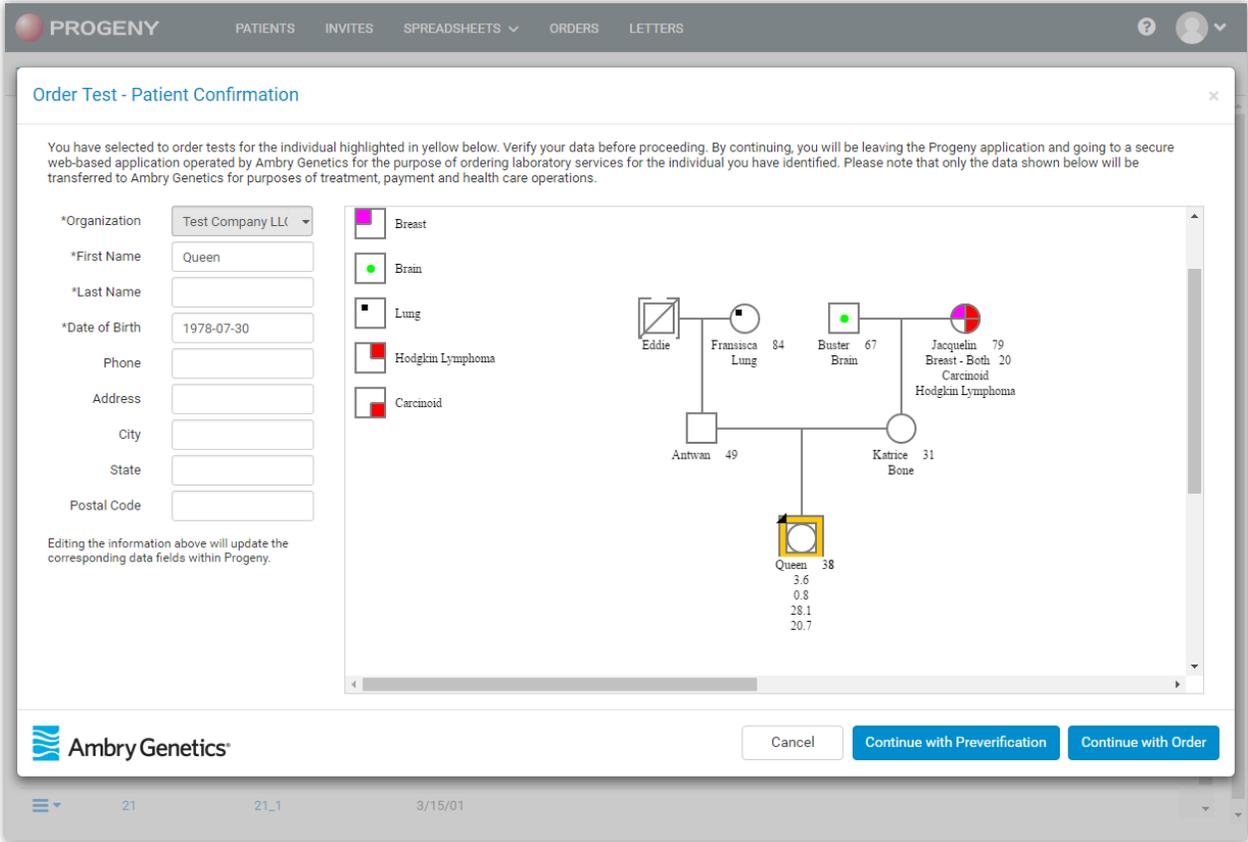
**Validation Errors** – Show if you have bad or missing data in the cancer table. Displayed in red on the Cancer Risk and/or Mutation Probabilities (Ex: missing age at breast cancer)

**Cancer Risk** – 5 year and Life

**Mutation Probabilities** – Any mutation probabilities displayed here

# How Do I Order Genetic Testing Through Progeny?

Order genetic testing from Ambry Genetics seamlessly within Progeny. Track orders and review results without ever leaving the application



Progeny Clinical features the ability to order genetic testing for any patient through Ambry Genetics. Ordering tests from the Progeny interface is easy and saves you time by passing the required patient data and pedigree securely to Ambry. The interface also allows you to check the status and results of all your orders with Ambry, even those that were not submitted through the Progeny interface. The addition of this feature completes a turnkey operation of collecting family history data from your patients, performing risk assessment to identify at-risk patients, and now ordering tests and reviewing results for those patients all in one place.

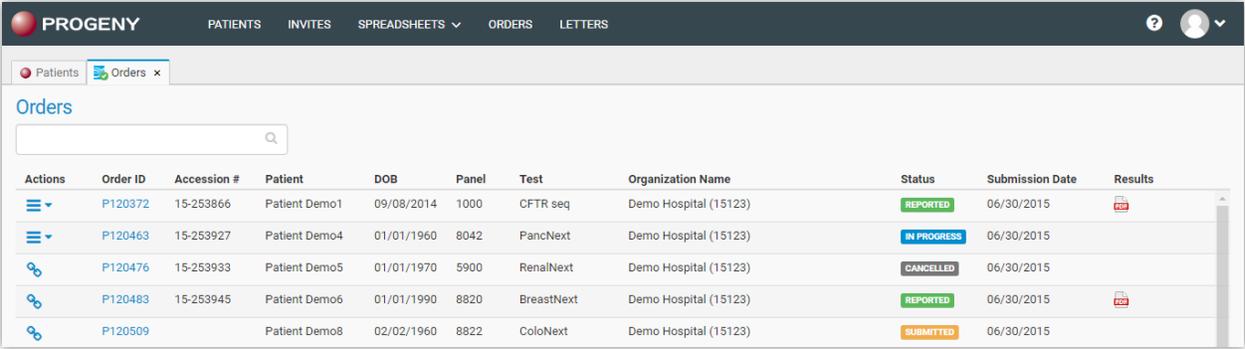
You can place a genetic test order from various screens inside of Progeny: Patients screen, Pedigree Viewer and Individual Datasheets by clicking on the Orders button.

[Click here to Request Order Setup if your Progeny account has not been set up with the Ambry Orders feature](#)

# Order Status

Check the genetic testing results within Progeny.

On the Patients Screen toolbar, click the Order Status button to check ALL orders you placed with Ambry Genetics, including orders that were placed outside of Progeny.



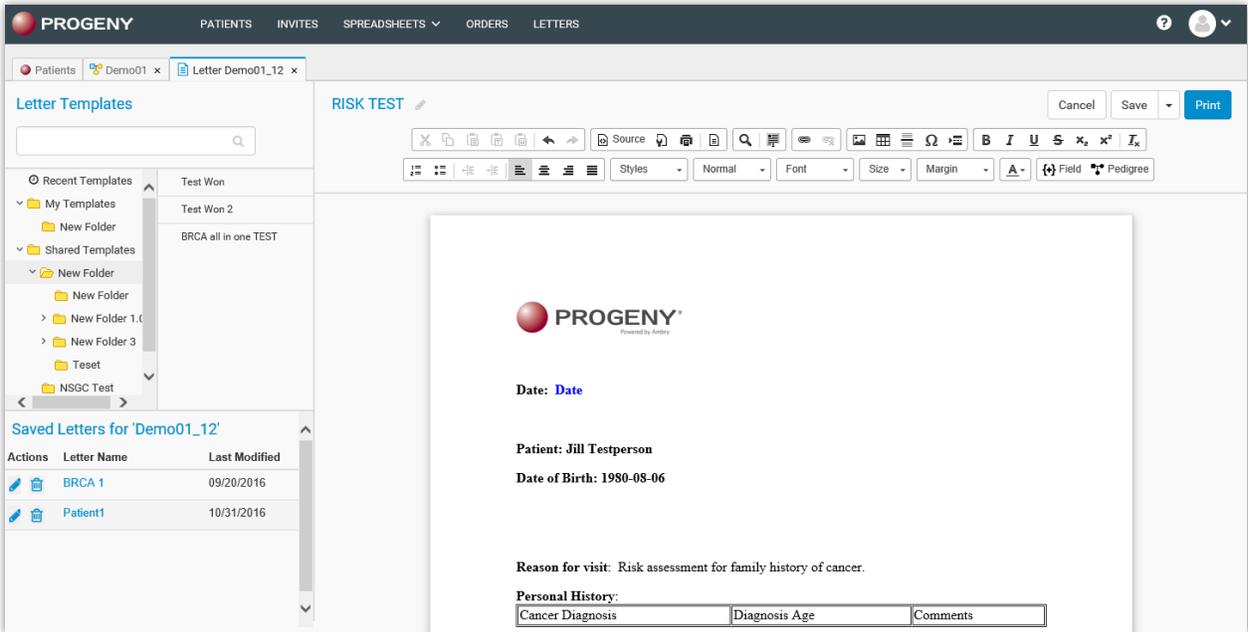
Actions	Order ID	Accession #	Patient	DOB	Panel	Test	Organization Name	Status	Submission Date	Results
☰	P120372	15-253866	Patient Demo1	09/08/2014	1000	CFTR seq	Demo Hospital (15123)	REPORTED	06/30/2015	
☰	P120463	15-253927	Patient Demo4	01/01/1960	8042	PancNext	Demo Hospital (15123)	IN PROGRESS	06/30/2015	
🔗	P120476	15-253933	Patient Demo5	01/01/1970	5900	RenalNext	Demo Hospital (15123)	CANCELLED	06/30/2015	
🔗	P120483	15-253945	Patient Demo6	01/01/1990	8820	BreastNext	Demo Hospital (15123)	REPORTED	06/30/2015	
🔗	P120509		Patient Demo8	02/02/1960	8822	ColoNext	Demo Hospital (15123)	SUBMITTED	06/30/2015	

- If you placed genetic testing orders with Ambry Genetics in the past, your orders will display here with an Actions option to Link to a patient.
- Orders that were placed within Progeny will display the Actions Button with options to Open Pedigree or Open Datasheet.

# Patient Letter Generator

## Creating a New Letter Template

The Letters option on the navigation tool bar opens up a Letter Templates tab. Here you can create, edit, and delete customized Letter Templates. The templates use an extensive editor that allows you to implement a variety of different styles, special characters, images, and links. Progeny also has two custom buttons in the editor: Field and Pedigree. Field will allow you to input any custom or system field placeholder in the database, and Pedigree will allow you to add a resizable placeholder for the pedigree image in the template. These letters can then be generated for any individual in the database. They can also be modified, and saved to a specific individual.



# Generate Letters for Patients

Access the generate letter screen to create letters for your patients using various methods.

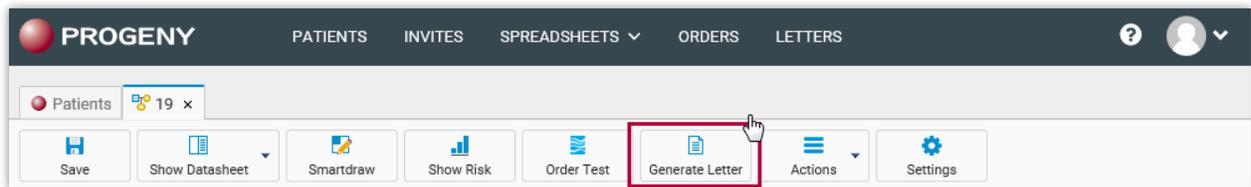
## PATIENTS SCREEN

On the Patient dashboard, click the **Actions Menu** dropdown, then choose Generate Letter.

Actions	Pedigree Name	Individual Name	Date of Birth	Gail 5 Year Breast Risk	MelaPro 5 Year Melanoma Risk
	18	18_1	2/16/81	0.2	0.2
Open Pedigree		19_2	7/30/78		0.2
Open Datasheet		20_1	12/20/13		
Invite Patient		21_1	3/15/01		
View Risk		22_1	4/16/69		
Delete Pedigree		23_4	11/19/41	1.8	0.3
Order Test		24_1	3/9/59		
Move Pedigree		25_1	3/15/83		
Generate Letter		26_1	1/11/99		

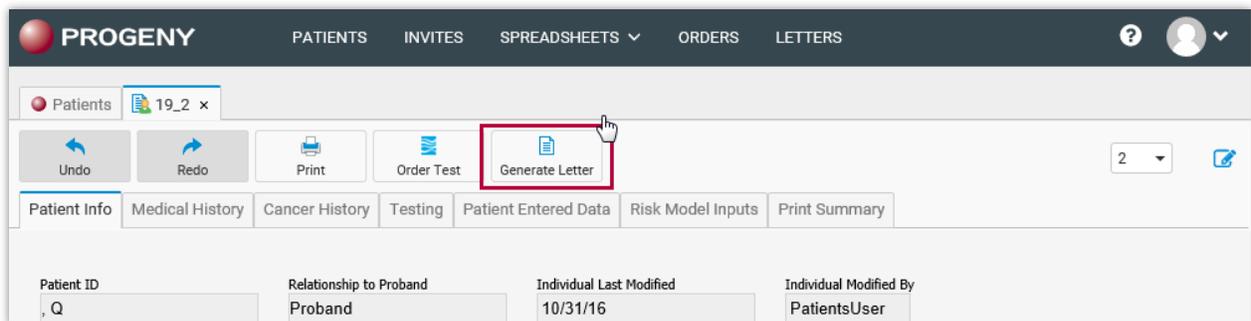
## PEDIGREE VIEWER

Click the Generate Letter button at the top toolbar menu for the Pedigree.



## INDIVIDUAL DATASHEET

Click the Generate Letter button on the Individual Datasheet toolbar menu.



## LETTER GENERATOR BUTTONS

-  Cut: deletes and copies selection to clipboard (Ctrl+X)
-  Copy: copies selection to clipboard (Ctrl+C)
-  Paste: pastes contents of clipboard
-  Paste as plain text: pastes contents of clipboard as the unformatted default format of the letter
-  Paste from Word: pastes contents from Microsoft Word
-  Undo: cancels the last change made and restores the letter to its previous state (Ctrl+Z)
-  Redo: reverts the last undo operation (Ctrl+Y)
-  **Source** Source: allows editing of html source code
-  Document Properties: displays window with General, Design, Meta Tags, and Preview options
-  Print: allows printing of letter
-  Templates: displays window of pre-defined forms with page layout, text formatting and styling
-  Find: displays window that allows searching and replacing multiple occurrences of text
-  Select All: selects all contents of the letter (Ctrl+A)
-  Link: displays window that allows adding of hyperlinks, anchors, and email addresses
-  Unlink: removes a link when cursor is placed in a link or part of a link is selected
-  Image: displays window that allows setting of configuration options that define image source, size, display properties, and other advanced properties
-  Table: displays window that allows setting of configuration options that define size, display properties, and other advanced properties
-  Insert Horizontal Line: adds a horizontal rule from one side of the letter to another at the location of the cursor
-  **Ω** Insert Special Character: displays a window that allows choosing of a symbol from a set containing Latin letters, numbers (including fractions), currency symbols, punctuation, arrows, and mathematical operators
-  **¶** Insert Page Break for Printing: adds a separation, at the location of the cursor, between physical pages when printed
-  **B** Bold: bolds text (Ctrl+B)
-  *I* Italic: italicize text (Ctrl+I)

-  Underline: underlines text (Ctrl+U)
-  Strikethrough: strikes text through
-  Subscript: sets a character that is slightly smaller than the text that surrounds it below the baseline
-  Superscript: sets a character that is slightly smaller than the text that surrounds it above the baseline
-  Remove Format: removes text styling from selected text to display default formatting
-  Insert/Remove Numbered List: creates or removes a numbered list
-  Insert/Remove Bulleted List: creates or removes a bulleted list
-  Decrease Indent: decreases the indentation of a block-level element containing the cursor by one tabulator length
-  Increase Indent: increases the indentation of a block-level element containing the cursor by one tabulator length
-  Align Left: aligns paragraph with the left margin and rags text on the right side
-  Center: aligns paragraph symmetrically along the vertical axis and rags text on both sides
-  Align Right: aligns paragraph with the right margin and rags text on the left side
-  Justify: aligns paragraph with the right margin and rags text on the left side
- Styles** ▾ Formatting Styles: allows selection of a number of pre-defined block and inline styles from a drop-down list
- Format** ▾ Paragraph Format: allows selection of a number of pre-defined block-level styles from a drop-down list
- Font** ▾ Font Name: allows selection of a number of typefaces that are applied to text
- Size** ▾ Font Size: allows selection of a number of font sizes that change how big or small the text is
- 0.00** ▾ Paragraph Margin: allows selection of a number of line spacing margins that change how much space is between each line in a paragraph
-  Text Color: allows selection of a number of colors for text
-  Field Add Field: displays a Field Chooser window that allows adding field placeholders from the database
-  Pedigree Add Pedigree: adds a resizable placeholder for the pedigree image

# Spreadsheets and Queries

Spreadsheet Queries are used for searching for specific field data and displaying the results in a spreadsheet. You can search either your Individual level fields or your Pedigree level fields.

From the Patients screen, click the Build Spreadsheet button to create a new spreadsheet or Run Spreadsheet to open a saved spreadsheet query format.

## BUILD SPREADSHEET

Select which Fields you wish to Query, add logical operators to your search, and specify how the results are sorted. This is a powerful tool which can be used to perform broad and general, or specific and granular queries of your database. After you build a Query it can be saved as a Format, then re-run or edited as needed.

The screenshot displays the PROGENY software interface for building a spreadsheet query. The top navigation bar includes 'PATIENTS', 'INVITES', 'SPREADSHEETS', 'ORDERS', and 'LETTERS'. Below the navigation bar are tabs for 'Patients', 'Individual Spreadsheets', and 'Result VUS in PALB2'. The main area is divided into four panes:

- Data Folders:** A tree view on the left showing categories like 'System Fields', 'Individual Data Folders', 'Core Fields', 'Medical History', 'PHI', 'Risk Model Fields', 'Summary Fields', 'Table Fields - NO QUERY', 'Custom Fields', and 'Pedigree Data Folders'.
- Fields:** A list of fields including 'BayesMendel - Affected Breast', 'BayesMendel - Affected Colon', 'BayesMendel - Affected Endometrium', 'BayesMendel - Affected Melanoma', 'BayesMendel - Affected Ovary', 'BayesMendel - Affected Pancreas', 'BayesMendel - Age Breast', 'BayesMendel - Age Breast Contralat', 'BayesMendel - Age Colon', 'BayesMendel - Age Endometrium', 'BayesMendel - Age Melanoma', 'BayesMendel - Age Ovary', 'BayesMendel - Age Pancreas', 'BayesMendel - BRCA1', 'BayesMendel - BRCA1 Test Order', 'BayesMendel - BRCA2', 'BayesMendel - BRCA2 Test Order', 'BayesMendel - CK14', 'BayesMendel - CK5.6', 'BayesMendel - Colon Location', 'BayesMendel - ER', 'BayesMendel - Ethnicity', 'BayesMendel - Her2', 'BayesMendel - Mastectomy', 'BayesMendel - Mastectomy Age', 'BayesMendel - MLH1', 'BayesMendel - MLH1 MSH2 MSH6', 'BayesMendel - MSH2', 'BayesMendel - MSH6', 'BayesMendel - MSI', 'BayesMendel - Oophorectomy', 'BayesMendel - Oophorectomy Age', and 'BayesMendel - P16'.
- Columns:** A table with columns 'Type Field' and 'Path'. It lists six columns: 'Individual Name' (System Fields), 'Name: First' (Core Fields\PHI), 'Date of Birth' (Core Fields\PHI), 'Current Age/Age at Death' (Core Fields\Computed Fields), 'Genetic Testing.Gene' (Core Fields\Medical History), and 'Genetic Testing.Result' (Core Fields\Medical History).
- Sort (Optional):** A table with columns 'Type Field' and 'Direction'. It lists one sort: 'Name: First' (Ascending).
- Query (Optional):** A table with columns 'Type', 'Field', 'Operator', 'Value', and 'AND/OR'. It lists two queries: 'Genetic Testing Gene equals PALB2' and 'Genetic Testing Result equals VUS'.

- Query Panes – The four panes on a query screen are for building the query
- On the left is the Fields pane which lists the fields of your database. You can search for fields in this pane by typing a portion of the field name into the search field atop the Fields pane

- The upper right Columns pane is used to list the columns (fields) you wish displayed on the results spreadsheet. The top to bottom ordering of fields in this pane will reflect as left to right columns on the spreadsheet results. You can change the order of the spreadsheet results columns by moving each field up or down in the Columns pane
- The middle right pane “Sort (optional)” determines the sort order of your query results. Drag fields from the Fields pane into this pane or use the Add to sort icon on a Column field to copy the field into the Sort pane
- Query (Optional) pane is where you can add specific conditions to a field, (Example: Last Name equals Smith)

## BUILDING QUERIES

To build a Spreadsheet Query, first select the level (Individual or Pedigree) you wish to query as shown above.

1. Select which field(s) you want shown on the spreadsheet results - You can use the search field to quickly find the field you are looking for. Just type in any portion of the field name and click the magnifying glass icon on the right side of the search field.  
Note, your spreadsheet results will be in the order that your fields are placed (top to bottom)
2. Drag the field into the Columns and/or Query panes
3. From the fields you have dragged into the Columns pane use the icons available in the mouse over menu to add it to the Sort or Query panes
4. Specify whether you would like to sort in ascending (default) or descending order. You may sort by several fields. The first field will be the primary sort column, the second field the secondary, and so on.
5. Configure the logical operators, values, Boolean operators, and parentheses (to apply an order of operations) in the Query pane.

## ORDER OF OPERATIONS FOR A QUERY:

When carrying out a multiple fields query, use parentheses to define the order of operations for a query. The order of operations determines the queries that must be carried out first in a series of queries. For example, the below image shows a query that first sorts individuals who were diagnosed with breast cancer at the age of 65. The query then sorts individuals who were diagnosed with colon cancer. Because this query uses the OR operator, the query returns individuals who meet either query criteria.

Query (Optional)					
Type (	Field	Operator	Value	)	AND/OR
 ▼	Genetic Testing.Gene	equals ▼	PALB2	▼	AND ▼
 ▼	Genetic Testing.Result	equals ▼	VUS	▼	▼


Once you've built your Query, you can Save the Format and Run the query from the top toolbar. See Logical Operators next.

## LOGICAL OPERATORS

The following page contains logical operators which are available to target your search results

Operator	Description
begins with	Search for an item where the specified field contains data that begins with the search criteria. For example, if the query field for individuals is the Weight field, and you specify Weight begins with 17, then only those individuals for whom the weight begins with a 17 (17 or 170-179) are returned in the search.
contains	Search for an item where the specified field contains any instance of the search criteria. For example, if the query field for individuals is the Weight field, and you specify Weight contains 75
does not begin with	Search for an item where the specified field contains data that does not begin with the search criteria. For example, if the query field for individuals is the Weight field, and you specify Weight does not begin with 17, then only those individuals for whom the weight does not begin with a 17 (0-16, 18 -169, and so on) are returned in the search.
does not contain	Search for an item where the specified field does not contain any instance of the search criteria. For example, if the query field for individuals is the Weight field, and you specify Weight does not contain 75, then all individuals who have a weight in which 75 does not appear (0-74, 76-174, 176274, and so on) are returned in the search.
does not end with	Search for an item where the specified field contains data that does not end with the search criteria. For example, if the query field for individuals is the Weight field, and you specify Weight does not end with 75, then only those individuals for whom the weight does not end with a 75 (074, 76-174, 176-274, and so on) are returned in the search.
does not equal	Search for an item that meets any criteria other than the specified value For example, if the query field for individuals is the Weight field, and you specify Weight $\neq$ 175, then only those individuals whose weight does not equal 175

ends with	Search for an item where the specified field contains data that ends with the search criteria. For example, if the query field for individuals is the Weight field, and you specify Weight ends with 75, then only those individuals for whom the weight ends with a 75 (75, 175, 275, and so on) are returned in the search.
equals	Search for an exact match. For example, if the query field for individuals is the Weight field, and you specify the search criteria as Weight = 175, then only those individuals whose weight is exactly 175 are returned in the search.
in	Allows for comma separated values to be entered into a field so that multiple items can be searched and returned in the search results. For example, if the query field for individuals is the Weight field, and you specify Weight in 75, 80, 85, 90, then all individuals whose weight is exactly 75, 80, 85, or 90 are returned in the search.  Note: You can copy and paste a list of values from .csv file into a query of this type.
is blank	Search for an item where the specified field contains absolutely no data. For example, if the query field for individuals is the Weight field, and you specify Weight is blank, only those individuals for whom data has not been entered into the Weight field are returned in the search.  Note: A zero (0) is an actual data value. This means that if a zero (0) has been entered into the Weight field for an individual, then the individual is not returned in the search.
is greater than	Search for an item that is greater than the specified value. For example, if the query field for individuals is the Weight field, and you specify Weight > 175, then only those individuals whose weight is greater than 175 are returned in the search.
is greater than or equal to	Search for an item that is greater than the specified value or is an exact match for the specified value. For example, if the query field for individuals is the Weight field, and you specify Weight $\geq$ 175, then those individuals whose weight is exactly 175 or greater are returned in the search.
is less than	Search for an item that is less than the specified value. For example, if the query field for individuals is the Weight field, and you specify Weight < 175, then only those individuals whose weight are less than 175 are returned in the search.
is less than or equal to	Search for an item that is less than the specified value or is an exact match for the specified value. For example, if the query field for individuals is the Weight field, and you specify Weight $\leq$ 175, then those individuals whose weight is exactly 175 or less are returned in the search.
is not blank	Search for an item where the specified field contains any valid data. For example, if the query field for individuals is the Weight field, and you specify Weight is not blank, all individuals for whom data has been entered into the Weight field are returned in the search.  Note: A zero (0) is an actual data value. This means that if a zero (0) has been entered into the Weight field for an individual, then the individual is returned in the search.

is not in	<p>Allows for comma separated values to be entered into a field so that multiple items can be searched and excluded from the search results. For example, if the query field for individuals is the Weight field, and you specify Weight is not in 75, 80, 85, 90, then all individuals whose weight is not exactly 75, 80, 85, or 90 are returned in the search.</p> <p>Note: You can copy and paste a list of values from .csv file into a query of this type.</p>
is not like	<p>A pattern matching search based on the keyword “like.” An underscore (_) is used to match exactly one character, and the percent sign (%) is used to indicate any number of characters. For example, if the query field for individuals is the Weight field, then to search for all individuals whose weight is not like 75, select “is not like” as the operator and enter %75 in the Value field. The % indicates that any number of characters can come before 75, for example, 0 -74, 176 - 184, 186 - 274, and so on.</p> <p>Note: You can use the % anywhere in the search criteria, for example, 75% or 7%5.</p>
like	<p>A pattern matching search based on the keyword “like.” An underscore (_) is used to match exactly one character, and the percent sign (%) is used to indicate any number of characters. For example, if the query field for individuals is the Weight field, then to search for all individuals whose weight is like 75, select “like” as the operator and enter %75 in the Value field. The % indicates that any number of characters can come before 75, for example, 75, 175, 275, and so on.</p> <p>Note: You can use the % anywhere in the search criteria, for example, 75% or 7%5.</p>

## RUN SPREADSHEET

Individual Name	Name: First	Date of Birth	Current Age/Ag	Genetic Testing	Genetic Testing
Smith4 Family_1	Erick	5/15/75	41	PALB2	VUS
16_16	Gerry	1/26/12	4	PALB2	VUS
22_1	Heidi	4/16/69	47	PALB2	VUS
ecardonatesttes	Hill	5/8/75	41	PALB2	VUS
11_6	Ila	5/27/84	32	PALB2	VUS
13_2	Ilda	2/8/84	32	PALB2	VUS

Run the spreadsheet. For more information on Building, editing, saving, using spreadsheets and queries, please see our full User Guide webpage.

*Need further assistance?*

*Want our extended user guides?*

*Our Support Team is here to help!*

support@progenygenetics.com

(800)-PROGENY

(800)-776-4369 x1

