Appendix A: Interview guides

Euretos - pharmaceutical research

Interview guide Bioinformaticians v1

Hi! My name is Ashwin van Dolder and I am master student Strategic Product Design (SPD) at the University of Technology Delft. Currently I am graduating at Euretos on the development of software aided literature research/discovery platforms. My goal is to improve the usability of the Euretos platform by observing/researching the current method of performing research in the field of pharmacology. By analysing the current working methods and how the Euretos platform is used, I will be able to detect service obstacles and determine the performance factors for a smooth experience.

RQ: How does the pharmaceutical research process look like and what is the influence of internet (applications) and search engines on this process?



Subtopics:

- The basic research process
- The use of computers, internet and search engines
- Euretos knowledge platform

Start

- Personal introduction
- Estimated 45 minutes
- (Ask permission to record)
- Explain the goal of the interview
- No answers are wrong, feel free to speak freely
- Assure privacy, the information will be kept anonymous

Subtopic 1: The basic research process

Opening question: Can you tell me what the starting point is of a research?

- How is this starting point determined?
- What do you contribute to the research?
- What is your personal goal of performing research?
- What is the final goal of performing research?
- What are the different phases of performing research?
- What are the most important milestones/key moments during the research process?
- How do you use existing research literature during the research process?
- How long does the average research process take?
- Are there any important influencing factors?
- Do you have any influence on the time it takes?
- What (if any) are the main causes of delays?
- Can you tell me if performing research is a collaborative effort or more of an individual effort?
- How does this affect doing research?
- In general, if you could change something, what would you like to see different?

Probes:

- Why? Why do you think that?
- Can you give me an example?
- Why does that stand out in your memory?
- Subtopic 2: The use of computers, internet and search engines
- What role does the use of computers, internet and search engines have on performing research?
- What are your personal experiences with using computers, internet and search engines for performing research?
- What did you use and why?
- Do you have any positive experiences with using computers and internet for performing research? Can you elaborate on that?
- Do you have any negative experiences with using computers and internet for performing research? Can you elaborate on that?
- How do you see the role of these technologies in the future?
- How would you like to see these technologies applied in the future?
- Are there any other technological trends/developments which could have beneficial effect on performing pharmaceutical research?

Probes:

- Why? Why do you think that?
- Can you give me an example?
- Why does that stand out in your memory?

Subtopic 3: Euretos the knowledge platform

- Euretos is developing software to support performing pharmaceutical research and you have been working with the knowledge platform for a while know. What were you expecting before you started using the platform?
- What were your first impressions?
- What functions did you use?
- Are there any functions you are missing?
- What do you think of the interface?
- When would you use the platform while performing research?
- Will you use the platform more often?
- Do you think that will be used more in the future?
- Are you willing to see new developments of the platform in the future and provide feedback?

- Why? Why do you think that?
- Can you give me an example?
- Why does that stand out in your memory?

Euretos - pharmaceutical research

Interview guide Bioinformaticians v2

Hi! My name is Ashwin van Dolder and I am master student Strategic Product Design (SPD) at the University of Technology Delft. Currently I am graduating at Euretos on the development of software aided literature research/discovery platforms. My goal is to improve the usability of the Euretos platform by observing/researching the current method of performing research in the field of pharmacology. By analysing the current working methods and how the Euretos platform is used, I will be able to detect service obstacles and determine the performance factors for a smooth experience.

RQ: How does the pharmaceutical research process look like and what is the influence of internet (applications) and search engines on this process?



Subtopics:

- The basic research process
- The use of computers, internet and search engines
- Euretos knowledge platform

Start

- Personal introduction
- Estimated 45 minutes
- (Ask permission to record)
- Explain the goal of the interview
- No answers are wrong, feel free to speak freely
- Assure privacy, the information will be kept anonymous

Subtopic 1: The basic research process

- Opening question: Can you tell me what the starting point is of a research?
- How is this starting point determined?
- What do you contribute to the research?
- What is your personal goal of performing research?
- · What is the final goal of performing research?
- What are the different phases of performing research?
- What are the most important milestones/key moments during the research process?
- How do you use existing research literature during the research process?
- How long does the average research process take?
- Are there any important influencing factors?
- Do you have any influence on the time it takes?
- What (if any) are the main causes of delays?
- Can you tell me if performing research is a collaborative effort or more of an individual effort?
- How does this affect doing research?
- In general, if you could change something, what would you like to see different?

- Why? Why do you think that?
- Can you give me an example?
- Why does that stand out in your memory?

Subtopic 2: The use of computers, internet and search engines

- What role does the use of computers, internet and search engines have on performing research?
- What are your personal experiences with using computers, internet and search engines for performing research?
- What did you use and why?
- Do you have any positive experiences with using computers and internet for performing research? Can you elaborate on that?
- Do you have any negative experiences with using computers and internet for performing research? Can you elaborate on that?
- How do you see the role of these technologies in the future?
- How would you like to see these technologies applied in the future?
- Are there any other technological trends/developments which could have beneficial effect on performing pharmaceutical research?

Probes:

- Why? Why do you think that?
- Can you give me an example?
- Why does that stand out in your memory?

Subtopic 3: Euretos the knowledge platform

- Euretos is developing software to support performing pharmaceutical research and you have been working with the knowledge platform for a while know. What were you expecting before you started using the platform?
- What were your first impressions?
- What was the main reason to use the platform?
- What functions did you use?
- What are the steps you take when using the platform?
- Are there any functions you are missing?
- What do you think of the interface?
- When would you use the platform while performing research?
- Will you use the platform more often?
- Would you recommend the platform to your colleagues?
- Do you think that will be used more in the future?
- Are you willing to see new developments of the platform in the future and provide feedback?

- Why? Why do you think that?
- Can you give me an example?
- Why does that stand out in your memory?

LUMC - biological research for drug development

Interview guide

Hi! My name is Ashwin van Dolder and I am master student Strategic Product Design (SPD) at the University of Technology Delft. Currently I am graduating at Euretos on the development of software aided literature research/discovery platforms. My goal is to improve the usability of the Euretos platform by observing/researching the current method of performing research in the field of pharmacology. By analysing the current working methods and how the Euretos platform is used, I aim to identify obstacles to the services offered by the Euretos platform and determine the performance factors for a smooth experience.

RQ: How does the biological research process for disease discovery and drug development look like and what is the influence of internet (applications) and search engines on this process?



Subtopics:

- The basic research process (general process, teamwork)
- The use of computers, internet and search engines
- Euretos knowledge platform
- Extension of the domain of the biologist into the domain of the bioinformaticians

Start

- Personal introduction
- Estimated 60 70 minutes
- (Ask permission to record)
- Explain the goal of the interview
- No answers are wrong, feel free to speak freely
- Assure privacy, the information will be kept anonymous

Subtopic 1: The basic research process

- Opening question: Can you tell me what the general starting point is of a research?
- How is this starting point determined?
- What is your personal contribution to a successful research?
- What is your personal goal in performing research?
- What are the different phases that you pass through during a research process?
- What are different steps that you take?
- What is the outcome of each step?
- What are the most important milestones/key moments during the research process?
- How do you use existing research literature during the research process?
- How long does the average research process take?
- Are there any important influencing factors?
- Do you have any influence on the time it takes?
- · What (if any) are the main causes of delays?
- Can you tell me if performing research is a collaborative effort or more of an individual effort?
- How does this affect your work?
- Do you consider bioinformaticians part of the research group? Why?
- In general, if you could change something, what would you like to see different?

Probes:

Why? Why do you think that?

- Can you give me an example?
- Why does that stand out in your memory?

Subtopic 2: The use of computers, internet and search engines

- What influence does the use of computers, internet and search engines have on performing research?
- What are your personal experiences with using computers, internet and search engines for performing research?
- What did you use and why?
- Do you have any positive experiences with using computers and internet for performing research?
- Can you describe a situation in which you encountered problems?
- What (might have) helped you in this situation?
- Do you have any negative experiences with using computers and internet for performing research?
- Can you describe a situation in which you encountered problems?
- What (might have) helped you in this situation?
- How do you see the role of these technologies in the future?
- How would you like to see these technologies applied in the future?
- How does these technologies affect the collaboration with other departments, like the bioinformaticians?
- Any suggestions on how software could have a positive effect on the collaboration?
- Are there any other technological trends/developments which could have beneficial effect on performing biological research?

Probes:

- Why? Why do you think that?
- Can you give me an example?
- Why does that stand out in your memory?

Subtopic 3: Euretos the knowledge platform

- Euretos is developing software to support performing pharmaceutical research aimed a primarily bioinformaticians, but from my understanding you have also used it for a short period of time. What were you expecting before you started using the platform?
- What were your first impressions?
- What was the main reason to use the platform?
- Which functions did you use?
- What are the steps you take when using the platform?
- Are there any functions you are missing?
- What do you think of the interface?
- When would you use the platform while performing research?
- Will you use the platform more often?
- Would you recommend the platform to your colleagues?
- Do you think that will be used more in the future?
- Are you willing to see new developments of the platform in the future and provide feedback?

Probes:

- Why? Why do you think that?
- Can you give me an example?
- Why does that stand out in your memory?

Subtopic 4: Extension of the domain of the biologist into the domain of the bioinformaticians

- What do you like about being a biologist?
- What do you dislike about being a biologist?
- From your point of view, what does a bioinformatician do?
- I spoke to some bioinformaticians and they think biologists are becoming like bioinformaticians because of user friendly software applications. What is your view on this matter?

- Are there any tasks which think you could or would like to perform instead of a bioinformatician?
- Which tasks do you consider to be too difficult to be performed by a biologist instead of a bioinformatician?
- What would be the effect on the research process if biologists would take over tasks which are now performed by bioinformaticians?
- How would this affect the collaboration with bioinformaticians?
- In an ideal world, how would like to see your profession and the collaboration with bioinformaticians?

- Why? Why do you think that?
- Can you give me an example?
- Why does that stand out in your memory?

GUI Designer - Expert interview

Introduction

Hi! My name is Ashwin van Dolder and I am master student Strategic Product Design (SPD) at the University of Technology Delft. Currently I am graduating at Euretos on the development of software aided literature research/discovery platforms. My goal is to improve the usability of the Euretos platform by observing/researching the current method of performing research in the field of pharmacology. By analysing the current working methods and how the Euretos platform is used, I aim to identify obstacles to the services offered by the Euretos platform and determine the performance factors for a smooth experience. An important part is the GUI design of the platform as it directly influences the usability of the platform and therefore the overall experience with the platform. As the platform has complex analysis tools, an intuitive user experience can lower the learn curve for using the platform.

RQ: What makes a graphical user interface intuitive and why/how to design it?

Subtopics:

- The basic design process (start, develop, validation, delivery)
- Improving usability, why intuitive?
- Design methods/guidelines
- Validation

Start

- Personal introduction
- Estimated 60 70 minutes
- (Ask permission to record)
- Explain the goal of the interview
- No answers are wrong, feel free to speak freely
- Assure privacy, the information will be kept anonymous

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Subtopic 1: Basic design process

Opening question: Can you tell me what a UX lead designer does?

- What are the most important phases of a UX design project?
- How are the minimal requirements (Programma Van Eisen) determined? Are there any?
- In an ideal scenario, what role do end-users play in the development process?
- How to explain user interaction with an interface to software developer / other team members?
- What if they are not convinced of the design/changes?
- If software engineers are working from a different country, which makes it more difficult to communicate in person, how would this affect the design process?
- How would you handle this situation?

Probes:

- Why? Why do you think that?
- Can you give me an example?
- Why does that stand out in your memory?

Subtopic 2: Improving usability (intuitive)

- When can a (G)UI be considered intuitive?
- Why?
- Can you give me an example?
- How to design for intuitive use?
- What are the most important aspects for intuitive use?
- Is intuitive use, the holy grail for (G)UI?
- · Are there other ways to improve the usability?
- How to balance between experienced professional users and novices?
- What are the most common mistakes for designing intuitive graphical user interfaces
- What is the worst GUI you ever used? Why?
- What do you consider as the best GUI you ever used/designed?

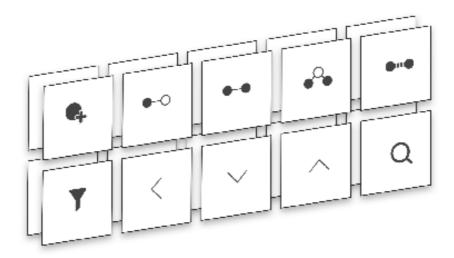
- Why? Why do you think that?
- Can you give me an example?
- Why does that stand out in your memory?

Appendix B: Euretos UI/UX Design Guidelines



UI/UX Design Guidelines

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787878
DCDCDC
F2F2F2
FFFFF



Typography

ARIAL

Title 24pt Bold

Header 1 14pt Regular

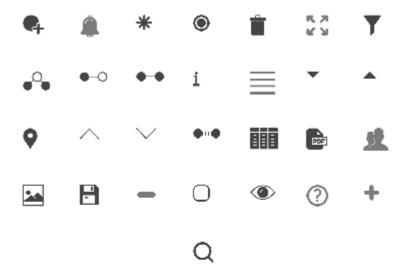
Header 2 12pt Regular

Text 12pt Regular

Link 1 14pt Bold Underlined

Function 12pt Bold Underlined

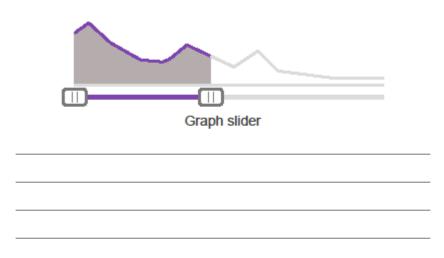
Icons



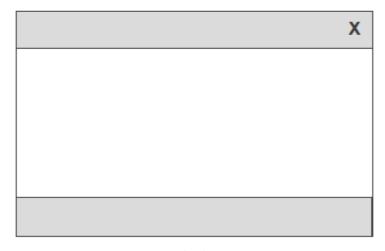
Buttons

Inactive
Hover
Click
Active

Other elements



Tables



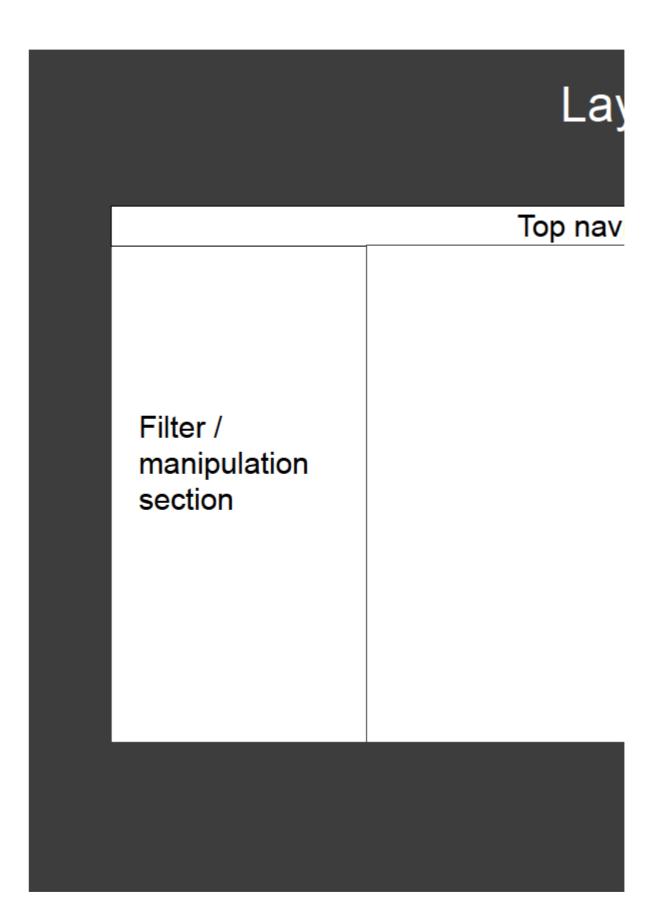
Content box

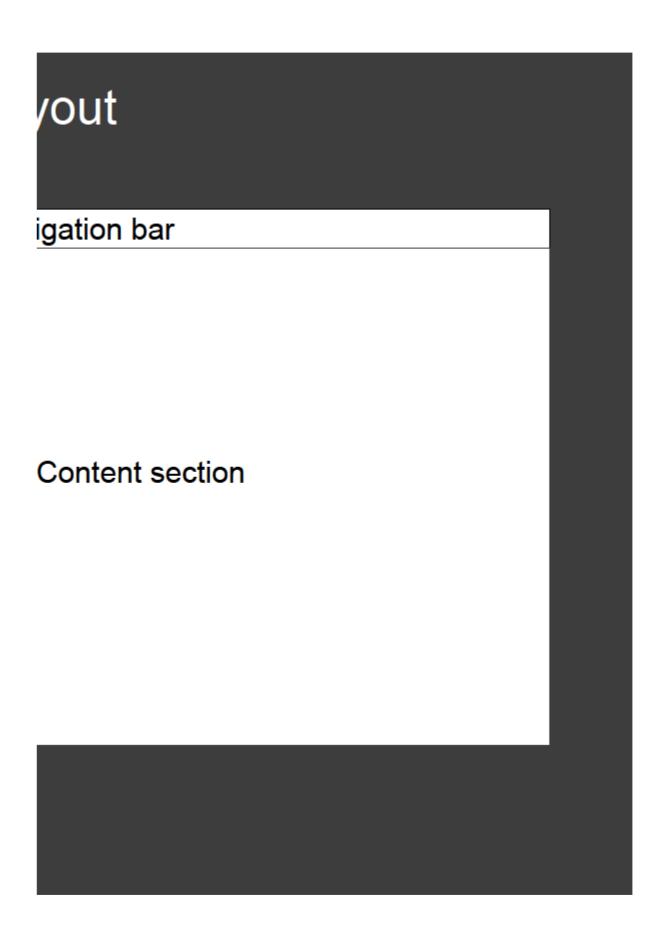
Navigation

Good navigation answers the following questions:

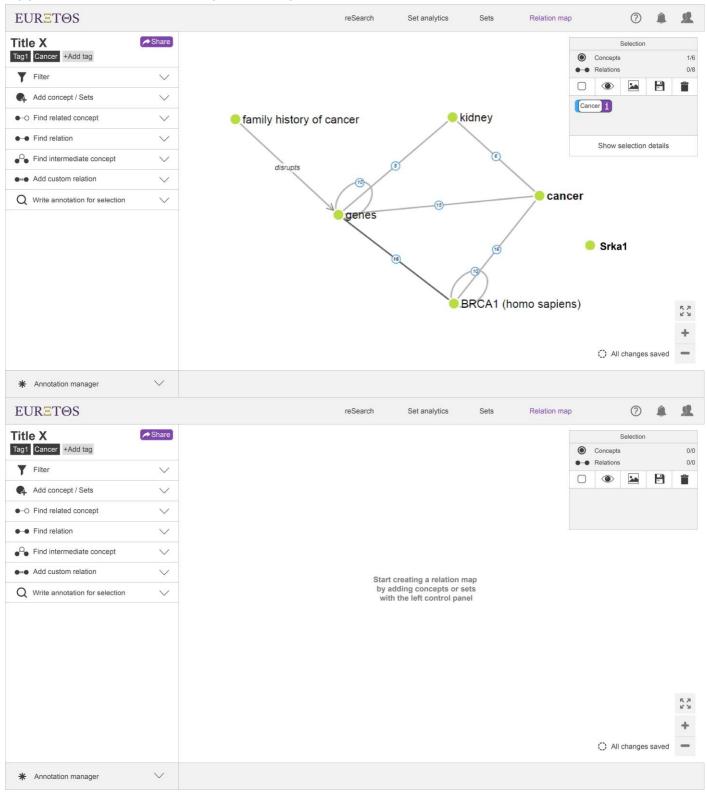
Where am I now?
Where else can I go?

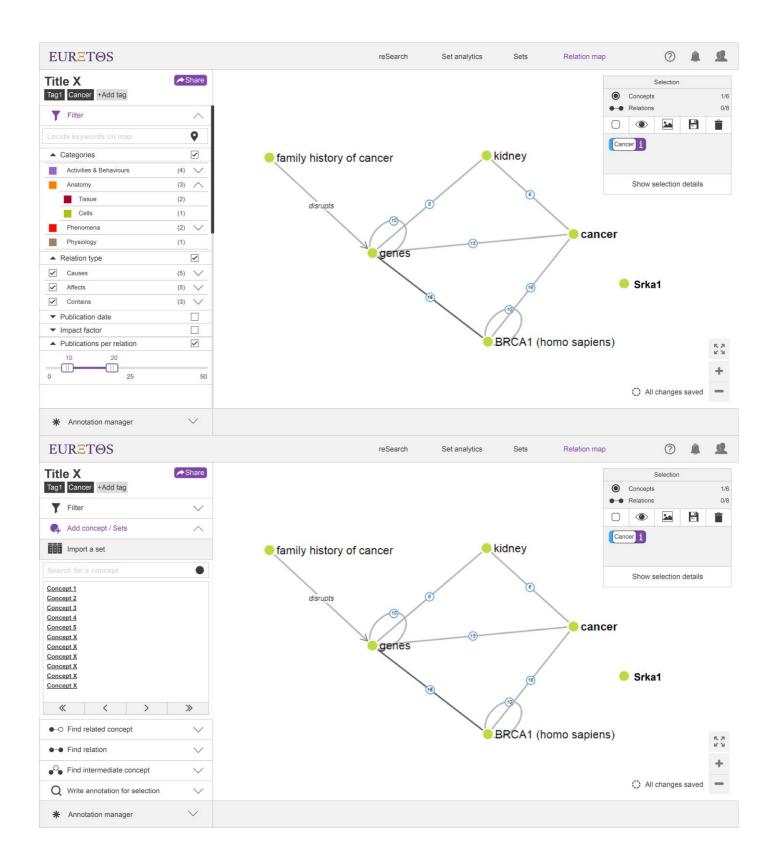
What will I find when I get there?

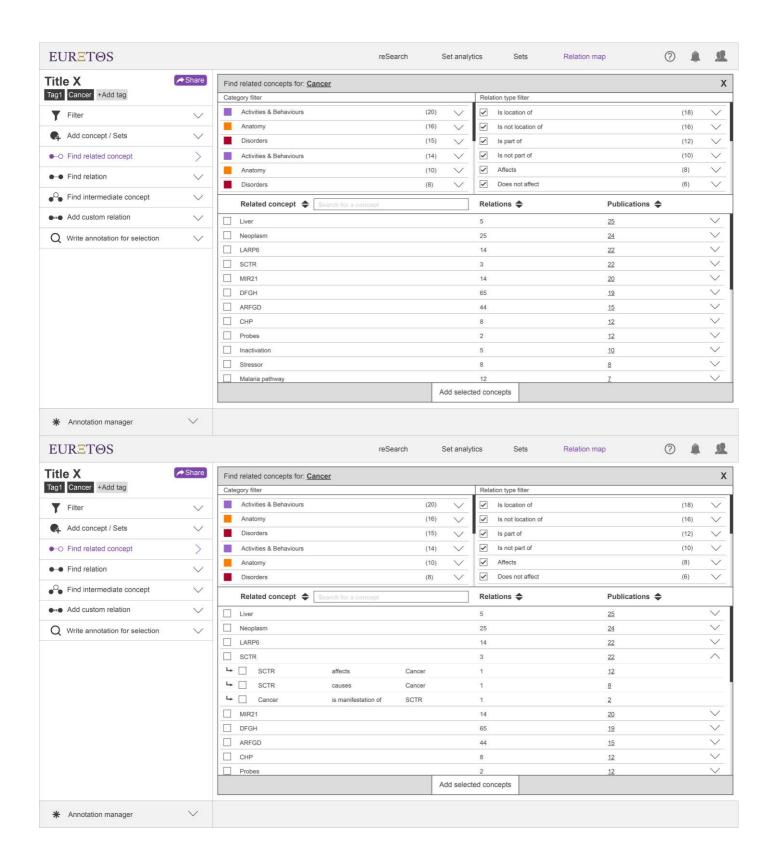


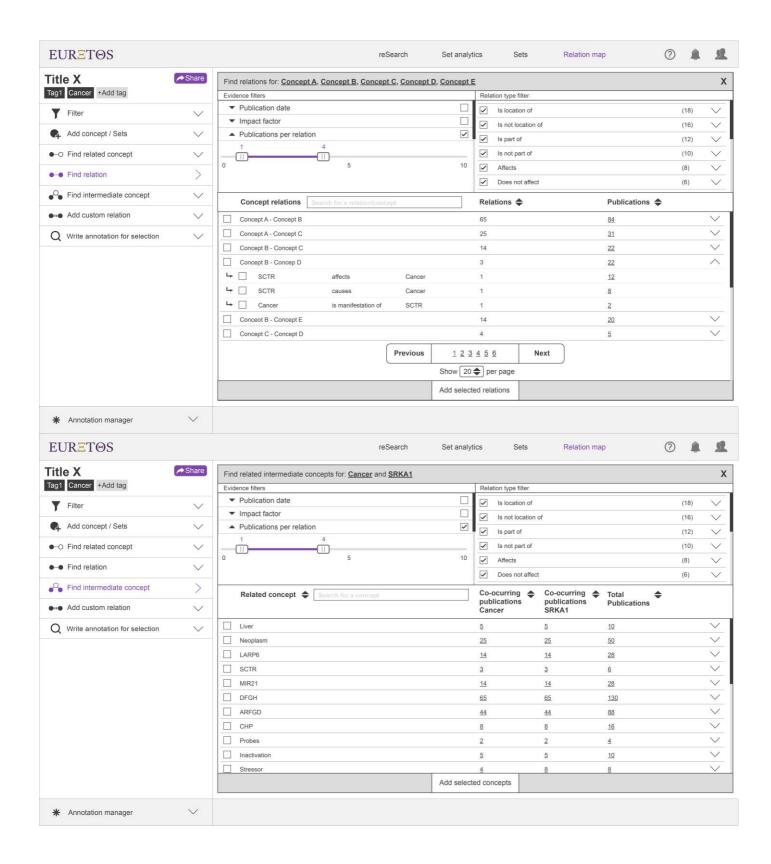


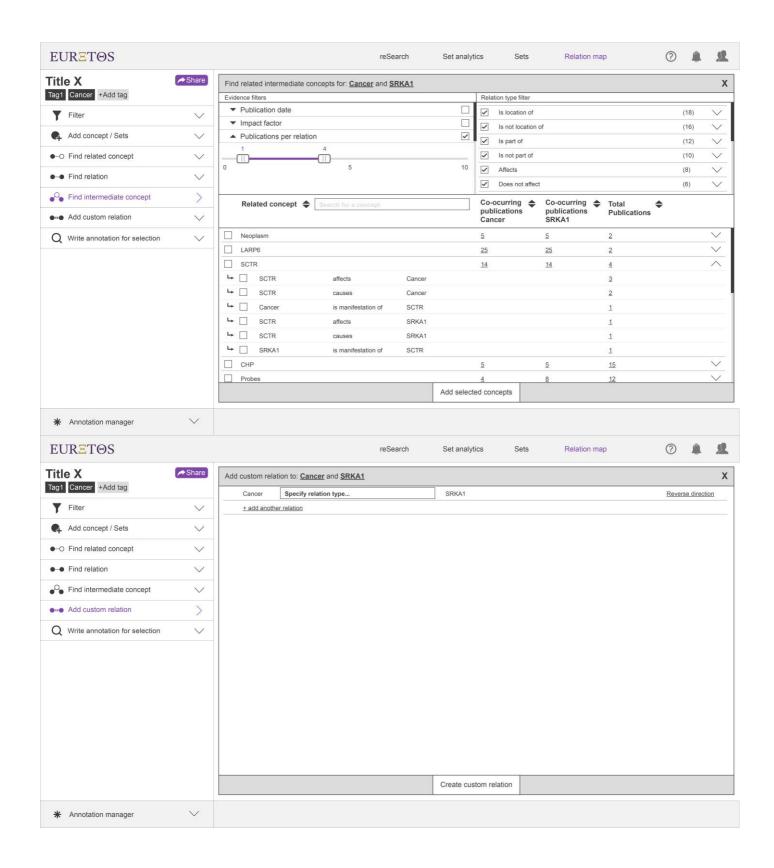
Appendix C: Relation map mock-ups

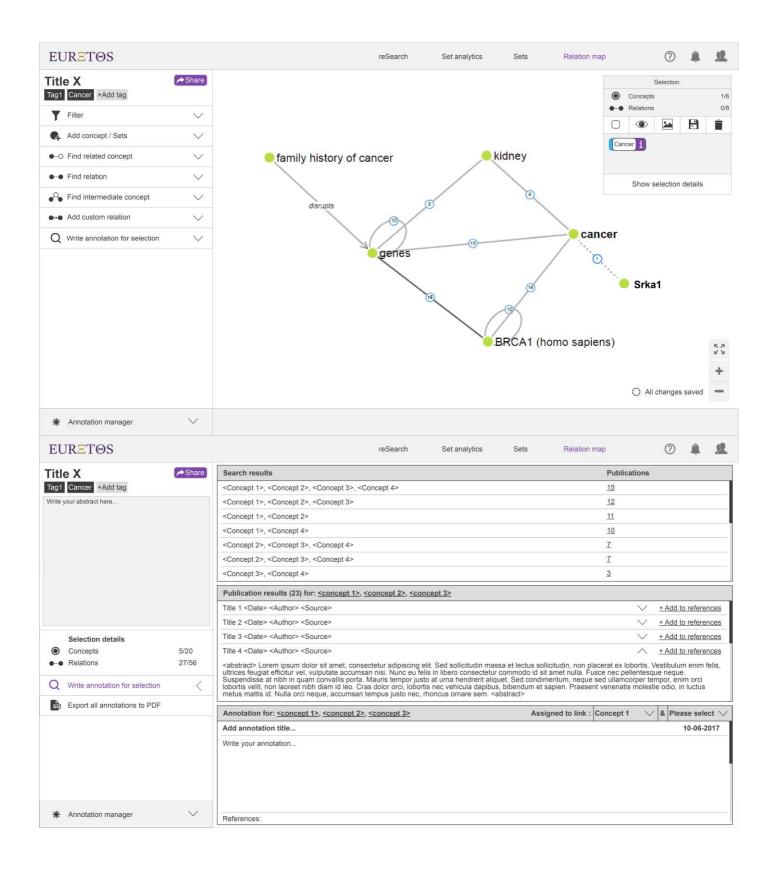


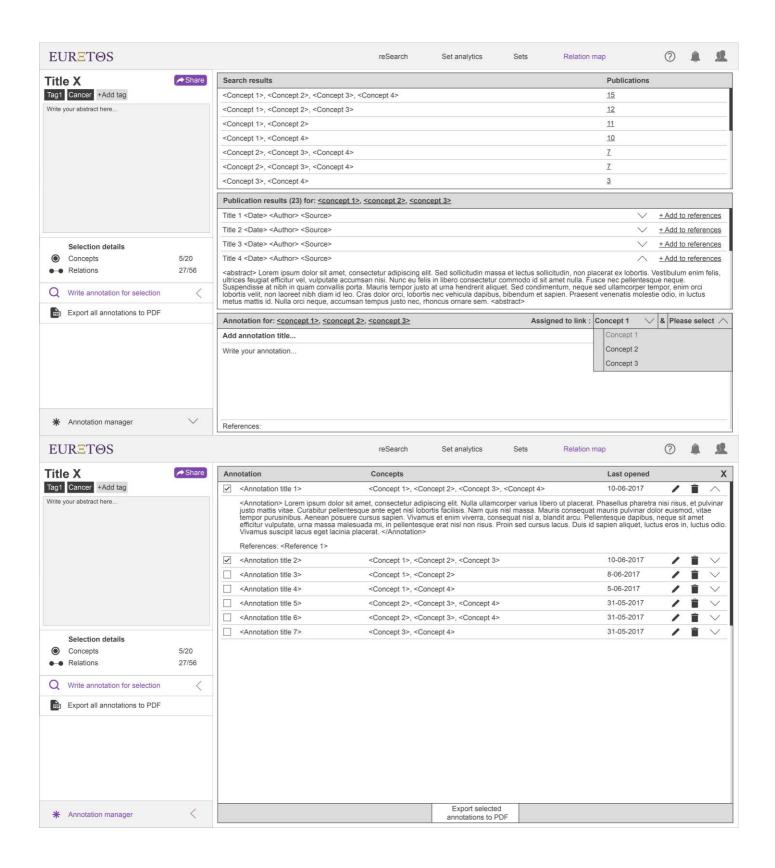


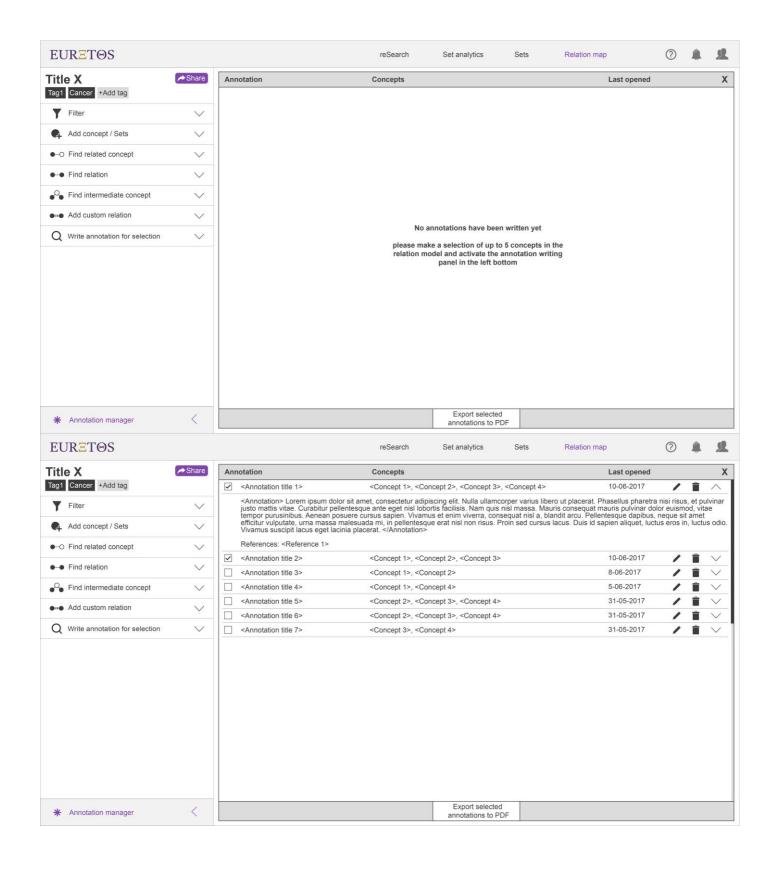


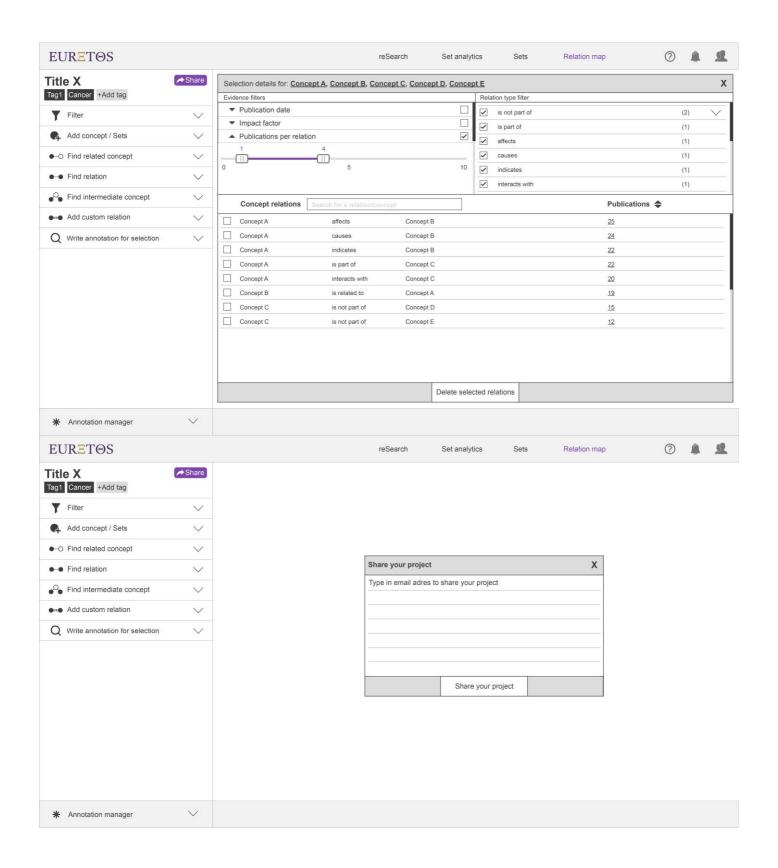


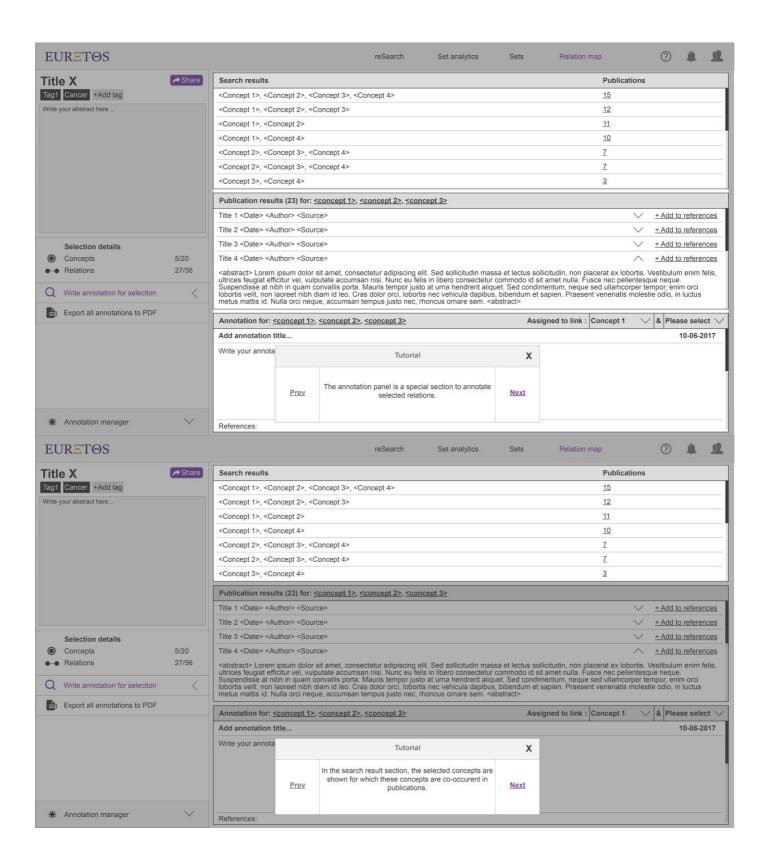


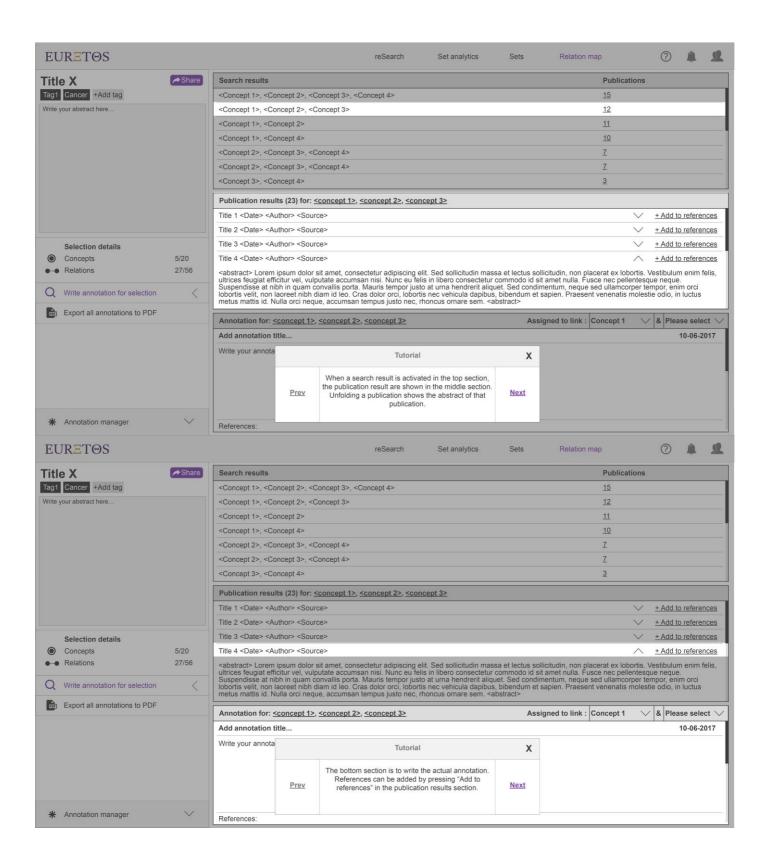


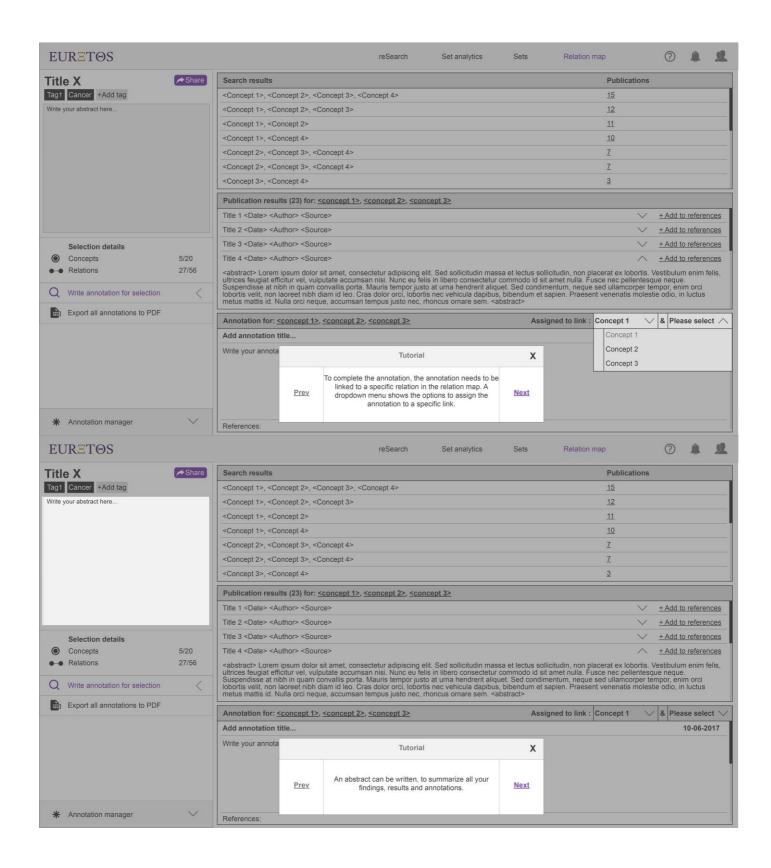


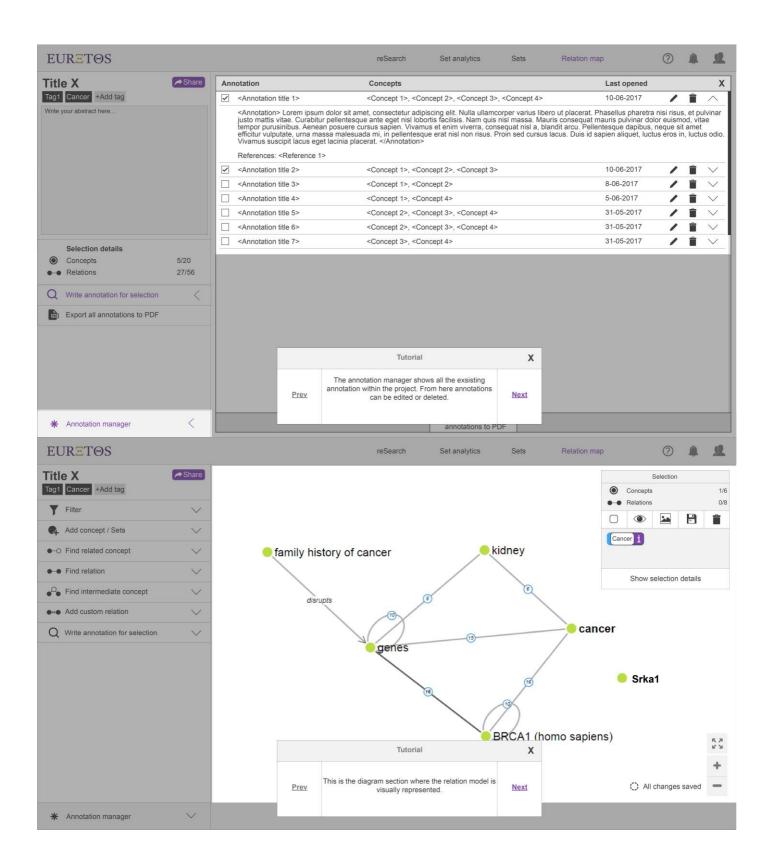


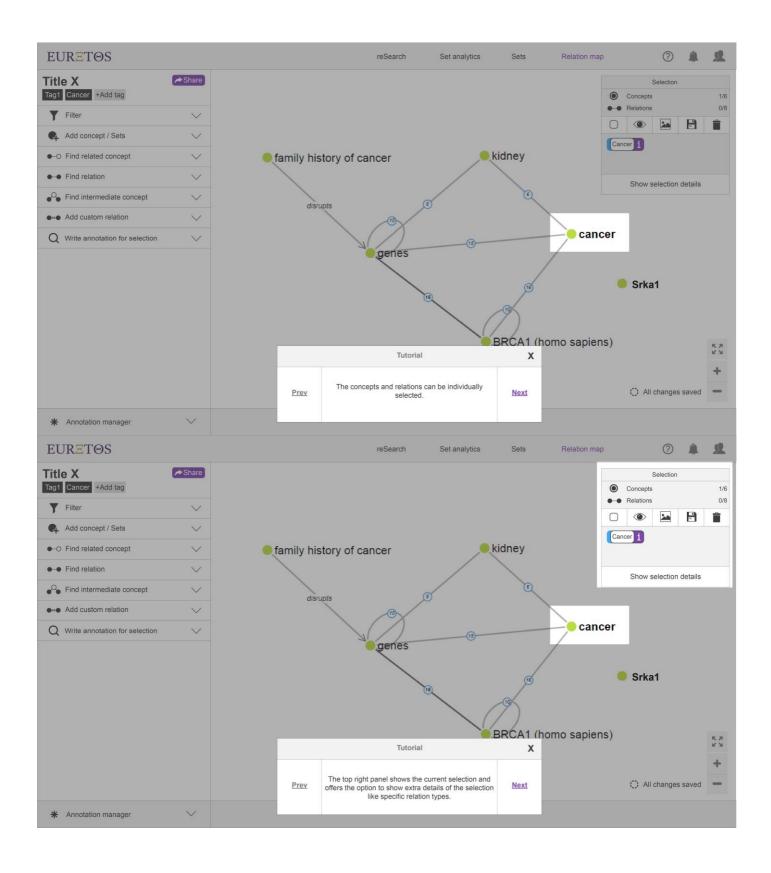


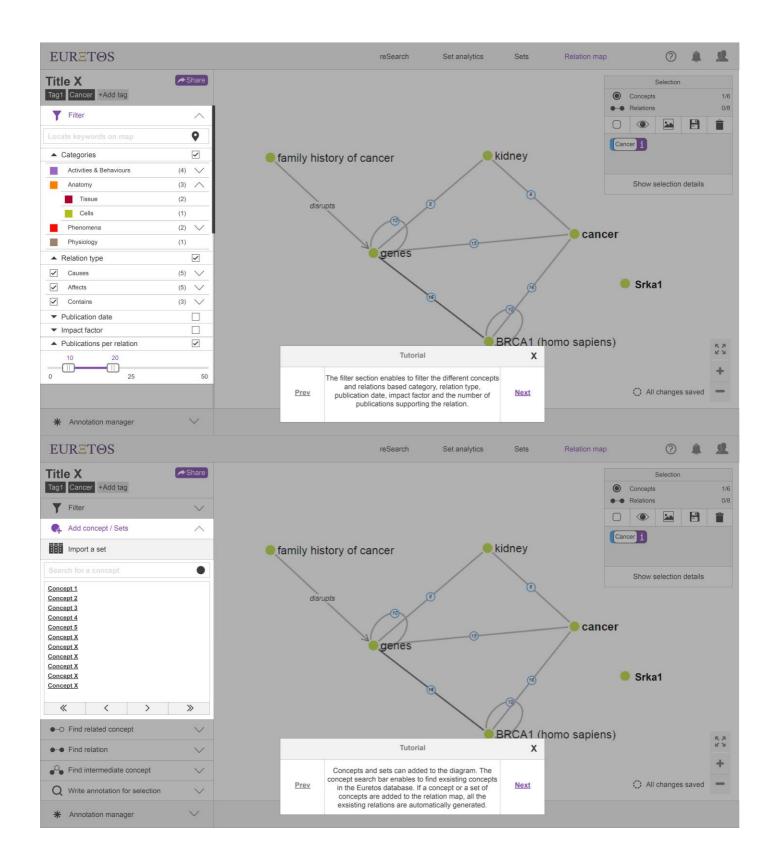


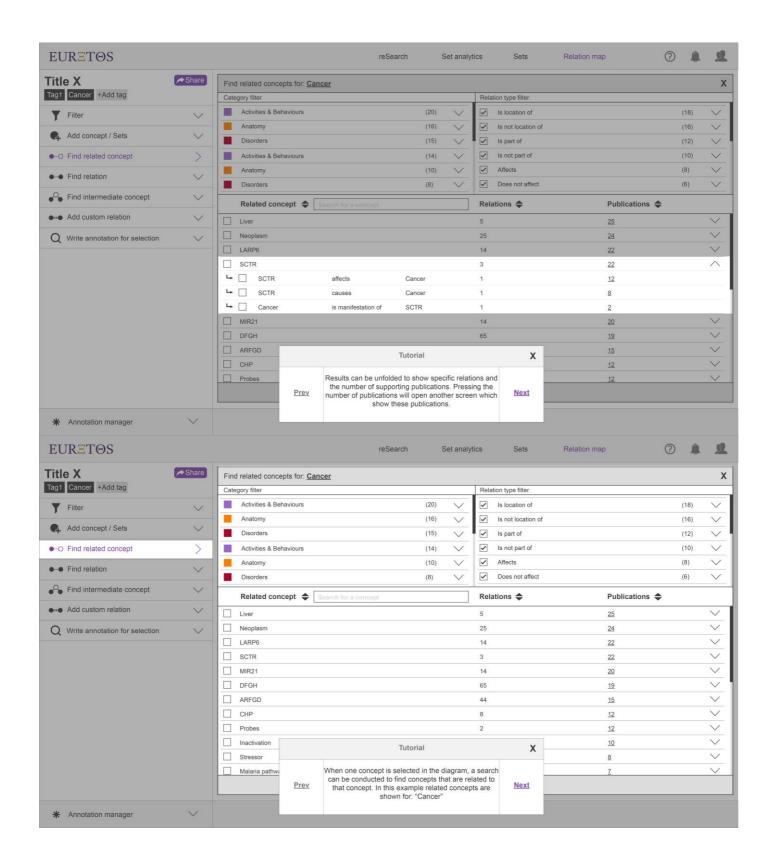


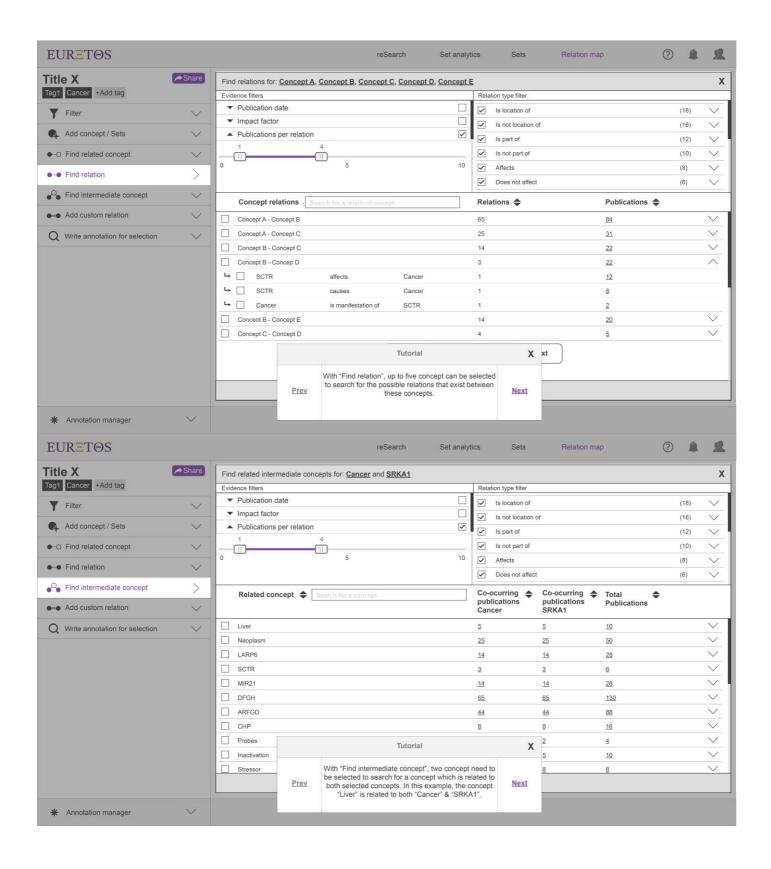


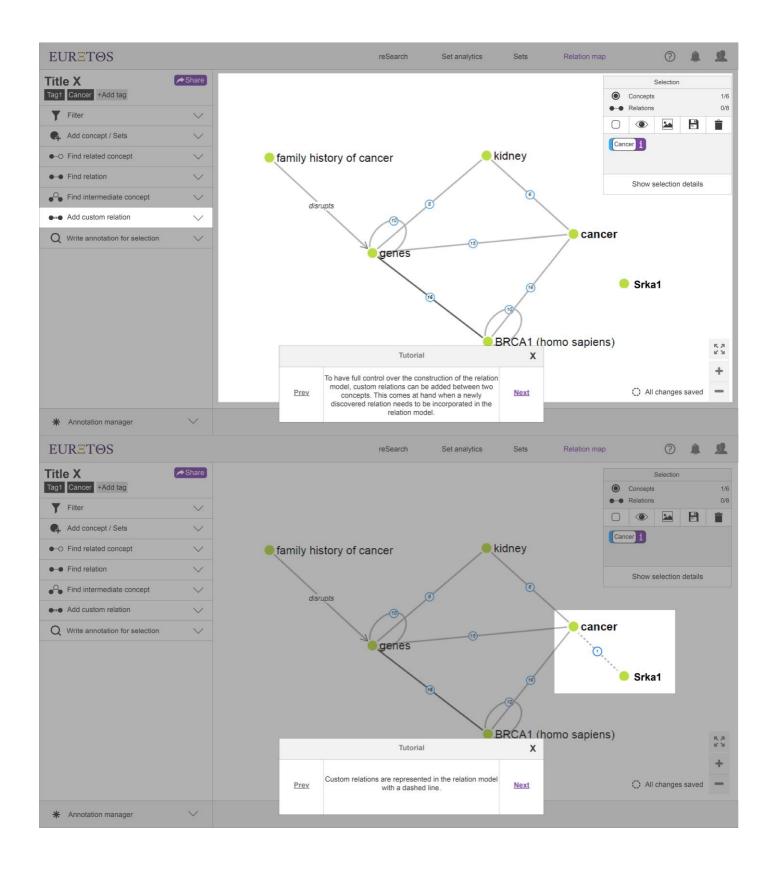


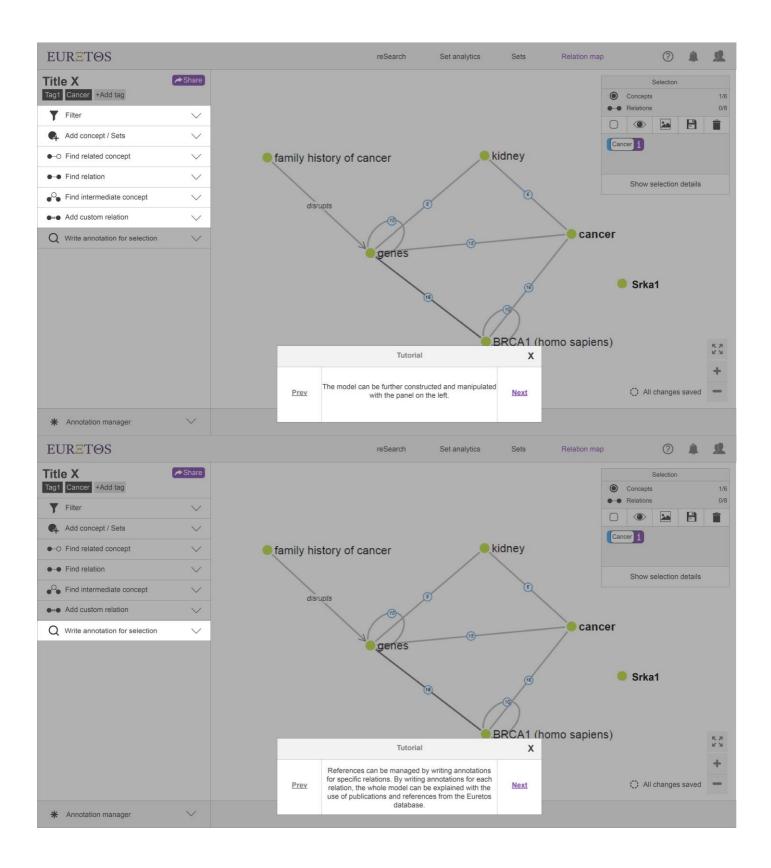


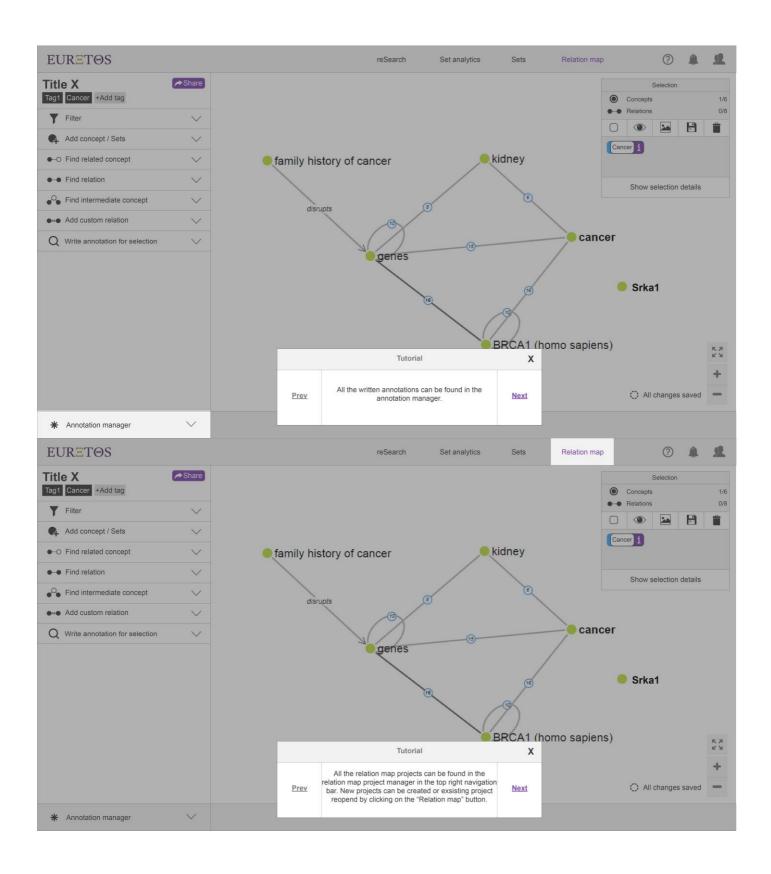












Appendix D: Relation map beta version screenshots

