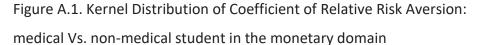
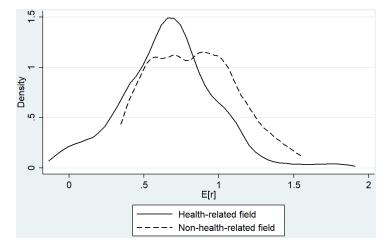
#### Appendix A: Kernel distribution for H&L in the monetary domain and in the health domain

This appendix compares predicted coefficients of relative risk aversion based on H&L in the monetary domain and H&L in the health domain. Predicted coefficients were obtained from the interval regression estimations by i) type of students (health-related students versus non-health-related students), and ii) type of payoffs (real versus hypothetical payoffs).

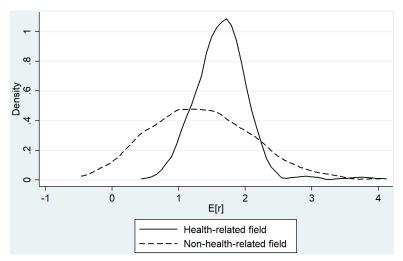
Figures A.1 and A.2 show the kernel distribution of the relative risk reduction coefficient, by type of student, for the monetary domain and the health domain, respectively. The results show that health-related students are less risk-averse than non-health related students in the monetary domain (r=0.665 Vs. r=0.832, mean coefficient of relative risk aversion of health-related Vs. non-health-related field, respectively), but more risk-averse in the health domain (r=1.654 Vs. r=1.336, mean coefficient of relative risk aversion of health-related field, respectively).





Probability density estimation based on an Epanechnikov kernel function. The figure represents the distribution of the coefficient of relative risk aversion based on the H&L in the monetary domain. Coefficients are predicted by the Interval regression estimates, for students in a health-related field (N=178) and students in a non-health-related field (N=78).

Figure A.2. Kernel Distribution of Coefficient of Relative Risk Aversion:

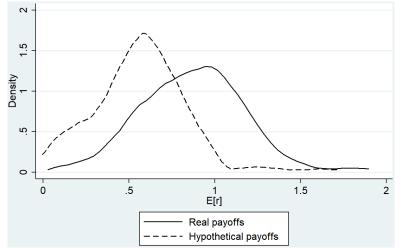


medical vs. non-medical student in the health domain

Probability density estimation based on an Epanechnikov kernel function. The figure represents the distribution of the coefficient of relative risk aversion based on the H&L in the health domain. Coefficients are predicted by the Interval regression estimates, combining the skewed-high and skewed-low frames, for students in a health-related field (N=351) and students in a non-health-related field (N=154).

Figures A.3 and A.4 show the kernel distribution of coefficient of relative risk reduction, by type of payoffs, for the monetary domain and the health domain, respectively. The results show that subjects in the real payoffs are more risk-averse than those in the hypothetical payoffs when they are in the monetary domain (r=0.566 Vs. r=0.872, mean coefficient of relative risk aversion of real payoff group Vs. hypothetical payoff group, respectively), but more risk-averse in the health domain (r=1.756 Vs. r=1.365, mean coefficient of relative risk aversion of real payoff group Vs. hypothetical payoff group, respectively).

Figure A.3. Kernel Distribution of Coefficient of Relative Risk Aversion:

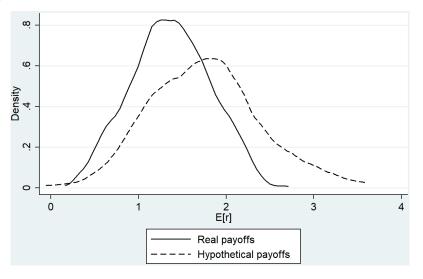


hypothetical vs. real in the monetary domain

Probability density estimation based on an Epanechnikov kernel function. The figure represents the distribution of the coefficient of relative risk aversion, based on the H&L in the monetary domain. Coefficients are predicted by the Interval regression estimates, for subjects in the real payoffs group (N=128) and in the hypothetical payoff group (N=128).

Figure A.4. Kernel Distribution of Coefficient of Relative Risk Aversion:

hypothetical Vs. real in the health domain



Probability density estimation based on an Epanechnikov kernel function. The figure represents the distribution of the coefficient of relative risk aversion, based on the H&L in the health domain. Coefficients are predicted by the Interval regression estimates, combining the skewed-high and skewed-low frames, for subjects in the real payoffs group (N=254) and in the hypothetical payoff group (N=251).

## Appendix B: General Instructions for subjects in real rewards groups.<sup>1</sup>

[The general instructions were given to the participants before the start of the experiment. The original instructions were presented in Spanish; the following is a translated version. These instructions were identical for all groups with real rewards].



#### I N S T R U C TIONS

This is an experiment to study how individuals make decisions. We are only interested in what individuals make on average. Keep in mind that we do not expect any particular behavior from you. However, be aware that your decisions throughout the experiment may influence your earnings. You can ask questions at any time; please, raise your hand and wait to be helped. Any communication among you is prohibited and subject to immediate exclusion from the experiment.

- You are about to participate in a study funded by the Spanish Ministry of Science and Innovation. In this study we are analyzing some aspects of medical decision-making, which will give us a better understanding of the relationship between doctors and patients, and contribute to the design of appropriate health policies. Pay attention, please, to these instructions because your answers are very important. We thank you in advance for your cooperation.
- This experiment consists of three phases. In the first phase you will face a number of monetary decisions, while in the other two phases you will take health decisions. Before starting each phase, you will receive a set of specific instructions for that phase.
- At the completion of the three phases of the experiment, we will ask you to complete a short questionnaire and you will be announced the earnings that were generated with the decisions you made.
- By answering all our questions you will receive a payment of 5 Euros in cash at the end of the experiment. Also you can get additional money depending on the choices you make. At each phase we will explain what determines the payments and how they are realized.
- At the end of the experiment the computer will make three random selections (one for each of the three phases of the experiment) to determine payments based on the monetary and health decisions that you have made.

<sup>&</sup>lt;sup>1</sup> Appendix C provides the general instructions and questionnaires to elicit risk aversion with money as outcome for those groups with real rewards. Appendix D provides the general instructions and questionnaires to elicit risk aversion with health as outcome for those groups with real rewards that were assigned to health context 1. Finally, Appendix E provides general instructions corresponding to the third part of the experiment whose data we do not analyze in this paper. Similar to Appendix C and D, Appendix E provides the questionnaires for groups with real rewards assigned to health context 1. The questionnaires for the groups with real rewards assigned to health context 1. The questionnaires for the groups with real rewards assigned to health context 1. The questionnaires for the groups with real rewards assigned to health contexts 2 and 3, as well as those corresponding to the hypothetical groups, are not included for space reasons but are available upon request. Each of the three different health contexts analyzed in the article are described in detail in section 3.3.

- As you can see, the gains from your financial decisions (Phase 1) will be for you, while the gains from your health decisions will be allocated to fund real medical treatments. In particular, the money will be transferred to Vicente Ferrer Foundation to finance the medical treatments offered by the network of health centers that the Foundation manages in Anantapur district, located in the state of Andhra Pradesh in India. Vicente Ferrer Foundation is an NGO committed to improving the development of the living conditions of the most disadvantaged communities in Andhra Pradesh.
- We have agreed with Vicente Ferrer Foundation that once completed the experiment, we will make a bank transfer for the total amount of the donation. Once the transfer has been made we will inform you by email.
- As everyone has the same opportunity to be paid for their decisions at the end of the experiment, we encourage you to choose the option you prefer at any phase, knowing that this option might be selected for the final payment.
- It is very important to know that this is not a test of skills since there is not a best option. The choice will depend on your personal preferences, which will not necessarily coincide with those of the rest of the participants.

# Appendix C: multiple price list task with money as outcome for subjects in real rewards groups.

[These are the instructions for Part 1 of the experiment. The original instructions were presented in Spanish; the following is a translated version. These instructions were identical for all groups with real payoffs].

In this phase of the experiment you have to make 11 choices between two possible options (A and B). With Option A, you can receive 10 or 8 Euros. With Option B, you receive 19.25 or 0.5 Euros. As you can see, potential outcomes are fixed for the 11 choices, while the probability of gaining one amount or the other is different.

Next, we show the screenshot of the example that you will face at this phase.

Decision 1	<b>A:</b> 0% 10 euros , 100% 8 euros	<b>B:</b> 0% 19.25 euros, 100% 0.5 euros
Decision 2	<b>A:</b> 10% 10 euros, 90% 8 euros	<b>B:</b> 10% 19.25 euros, 90% 0.5 euros
Decision 3	<b>A:</b> 20% 10 euros, 80% 8 euros	<b>B:</b> 20% 19.25 euros, 80% 0.5 euros
Decision 4	<b>A:</b> 30% 10 euros, 70% 8 euros	<b>B:</b> 30% 19.25 euros, 70% 0.5 euros
Decision 5	<b>A:</b> 40% 10 euros, 60% 8 euros	<b>B:</b> 40% 19.25 euros, 60% 0.5 euros
Decision 6	<b>A:</b> 50% 10 euros, 50% 8 euros	<b>B:</b> 50% 19.25 euros, 50% 0.5 euros
Decision 7	<b>A:</b> 60% 10 euros, 40% 8 euros	<b>B:</b> 60% 19.25 euros, 40% 0.5 euros
Decision 8	<b>A:</b> 70% 10 euros, 30% 8 euros	<b>B:</b> 70% 19.25 euros, 30% 0.5 euros
Decision 9	<b>A:</b> 80% 10 euros, 20% 8 euros	<b>B:</b> 80% 19.25 euros, 20% 0.5 euros
Decision 10	<b>A:</b> 90% 10 euros, 10% 8 euros	<b>B:</b> 90% 19.25 euros, 10% 0.5 euros
Decision 11	<b>A:</b> 100% 10 euros, 0% 8 euros	<b>B:</b> 100% 19.25 euros, 0% 0.5 euros

- Please note that in Decision 1, option A implies 8 euros for certain, while option B ensures you 0.5 euros. At the same time, in Decision 11, option A guarantees 10 euros, while option B guarantees 19.25. Thus, as you can see, going down the table, option B becomes more attractive, as it increases the probability of winning the larger amount (19.25 Euros). Note that in option A the same thing happens.
- It is very important to know that this is not a test of skills since there is not a best option. The choice will depend on your personal preferences, which will not necessarily coincide with those of the rest of the participants.
- At the end of the experiment, the computer will randomly choose one of your 11 choices in part 1 to make your payment.

## Payments in Part 1

Suppose, for instance, computer randomly selects Decision 5.

- *Option A*: 40% 10 Euros, 60% 8 Euros
- Option B: 40% 19.25 Euros, 60% 0.5 Euros

If you have chosen option A you can receive 10 or 8 euros. If you chose option B you can receive 19.25 or 0.5 euros.

Thus, afterwards, the computer will randomly select a number between 1 and 11. In both options A and B you have 40% of probability of receiving the larger amount of money in each of the options and 60% of receiving the lowest amount. Thus, if the computer randomly selects a number lower than 4 you will receive the maximum amount, while if the number is larger than 6 you will receive the minimum.

Suppose for instance that you have chosen Option A. If the computer selects a number between 1 and 4 (both included), you will receive 10 euros and if the number is between 5 and 10 you will receive 8 euros. Similarly, if you have chosen Option B, and the computer selects a number between 1 and 4 (both included), you will receive 19.25 euros and if the number is between 5 and 10 you will receive 0.5 euros.

Please select one of the options in each of the following 11 decisions.

End Phase I

# Appendix D: Two multiple price list tasks with health as outcome for subjects in real rewards groups.

[These are the instructions for Part 2 of the experiment. The original instructions were presented in Spanish; the following is a translated version. These instructions were identical for all groups with real payoffs that were assigned to the health context 1 (health gains in years of life in perfect health), except for the order effects included between frames (skewed high or skewed low) and parts (tasks to elicit risk aversion with health as outcome versus task to elicit equity preferences). The results of the equity task will be analyzed in a different paper].

In phases II and III of the experiment we will ask you to imagine what you would do in a number of medical decisions. While it is true that in this experiment there are not real patients, we want you to think about patients as if they were real. In order to do this, the choices you make in these two phases will benefit real patients. In particular, the money earned with your decisions will fund treatments that Vicente Ferrer Foundation delivers to patients through its network of health centers in the district of Anantapur, in the state of Andhra Pradesh in India.

In this room there are 32 individuals (including you) facing exactly the same decisions. At the end of the experiment, the computer will randomly select one of the participants in order to compute the amount of the donation directed to Vicente Ferrer Foundation. The same will be done in Phase III. If you are chosen, thus, your decision will determine the health outcomes of your (hypothetical) patients, which in turn will imply a transfer of money to Vicente Ferrer Foundation.

Lastly, as perhaps it may seem that the amount of money you can give to Vicente Ferrer Foundation is not high, you should think that in India the cost of many basic treatments to reduce mortality is very low. For example with 5 Euros you can save the life of a patient with typhus.

#### Phase II

In this phase of the experiment we ask you to imagine what you would do in a number of medical decisions to treat a patient. As you will see, the situation we show you is very simple. We know that, in real life, medical decisions are much more complex. Try to respond what you believe you would do in each of the cases that are presented.

Let us start with an example of a Decision that you should take at this phase of the experiment.

Suppose you are a doctor you have to treat a <u>middle-aged adult patient</u> having a disease diagnosed with certainty. You have to choose between two possible treatments (A and B). In the case of treatment A, if it is successful, the patient will gain additional 16 years of life and if it does not work, 12 years. With treatment B, if it is successful, the patient will gain 39 additional years and if it goes wrong 4 years. **Importantly, the patient will enjoy good health the additional years of life**. However, the probability of going well or badly of each treatment is unknown. That depends on each patient. We present 11 different choices. In each, the probability that A and B treatments are successful is different. We ask you to tell us what treatment you choose in each of the 11 situations.

Next, we show a screenshot of one of the examples that you will face at this phase.

Decision 1	<b>A:</b> 0% 16 years of life , 100% 12 years	<b>B</b> : 0% 39 years of life, 100% 4 years
Decision 2	<b>A:</b> 10% 16 years, 90% 12 years	<b>B:</b> 10% 39 years, 90% 4 years
Decision 3	A: 20% 16 years, 80% 12 years	<b>B:</b> 20% 39 years, 80% 4 years
Decision 4	A: 30% 16 years, 70% 12 years	<b>B:</b> 30% 39 years, 70% 4 years
Decision 5	<b>A:</b> 40% 16 years, 60% 12 years	<b>B:</b> 40% 39 years, 60% 4 years
Decision 6	<b>A:</b> 50% 16 years, 50% 12 years	<b>B:</b> 50% 39 years, 50% 4 years
Decision 7	<b>A:</b> 60% 16 years, 40% 12 years	<b>B:</b> 60% 39 years, 40% 4 years
Decision 8	<b>A:</b> 70% 16 years, 30% 12 years	<b>B:</b> 70% 39 years, 30% 4 years
Decision 9	<b>A:</b> 80% 16 years, 20% 12 years	<b>B:</b> 80% 39 years, 20% 4 years
Decision 10	<b>A:</b> 90% 16 years, 10% 12 years	<b>B:</b> 90% 39 years, 10% 4 years
Decision 11	A: 100% 16 years, 0% 12 years	<b>B:</b> 100% 39 years, 0% 4 years

#### [TABLE CONTEXT a.1]

- Note that, although the mechanism is similar to the previous one, now what you win or lose is very different: years of life in perfect health instead of euros. Options A and B are different and therefore probably what you choose in each Decision may be different as well.
- Remember that at the end of the experiment, the computer will randomly choose one of the 32 participants to compute the payments of this phase of the experiment. Such payments will depend on the years of life gained by the patient of the selected participant. We proceed as before:
- The computer will choose the Decision that is played first.
- The computer randomly draws a number from 1 to 10 to determine the number of years of life that will gain your patient, given your selected treatment.

- Depending on the years in perfect health the patient gained, the donation to Vicente Ferrer Foundation will be higher or lower. In particular, to make payments at this phase, we assume that an additional year of life in perfect health amounts to 4 Euros.
  - If the patient gains 39 years, Vicente Ferrer Foundation will receive 156 Euros.
  - If the patient gains 16 years Vicente Ferrer Foundation will receive 64 Euros.
  - If the patient gains 12 years Vicente Ferrer Foundation will receive 48 Euros.
  - If the patient gains 4 years Vicente Ferrer Foundation will receive 16 Euros.

In what follows we ask you to tell us which treatment you would choose in each of the following 11 decisions.

# [INSERT TABLE CONTEXT a.1]

The frame we present now also refers to **the number of years of life in perfect health** that a patient can gain. However, the numbers have changed and, therefore, your preferred option for each Decision may change too. We ask you to tell us which treatment you would choose in each of these 11 situations that we show below.

If any of them is chosen by the computer to make the payment, the computation is performed as in the previous example. In this case, the Vicente Ferrer Foundation will receive 76 Euros, 64 Euros, 48 Euros or 16 Euros, if your patient gains 19, 16, 12 or 4 years of life in perfect health respectively.

Decision 1	A: 0% 16 years of life , 100% 12 years	<b>B:</b> 0% 19 years of life, 100% 4 years
Decision 2	<b>A:</b> 10% 16 years, 90% 12 years	<b>B:</b> 10% 19 years, 90% 4 years
Decision 3	A: 20% 16 years, 80% 12 years	<b>B:</b> 20% 19 years, 80% 4 years
Decision 4	A: 30% 16 years, 70% 12 years	<b>B:</b> 30% 19 years, 70% 4 years
Decision 5	<b>A:</b> 40% 16 years, 60% 12 years	<b>B:</b> 40% 19 years, 60% 4 years
Decision 6	<b>A:</b> 50% 16 years, 50% 12 years	<b>B:</b> 50% 19 years, 50% 4 years

# [TABLE CONTEXT a.2]

Decision 7	<b>A:</b> 60% 16 years, 40% 12 years	<b>B:</b> 60% 19 years, 40% 4 years
Decision 8	<b>A:</b> 70% 16 years, 30% 12 years	<b>B:</b> 70% 19 years, 30% 4 years
Decision 9	<b>A:</b> 80% 16 years, 20% 12 years	<b>B:</b> 80% 19 years, 20% 4 years
Decision 10	<b>A:</b> 90% 16 years, 10% 12 years	<b>B:</b> 90% 19 years, 10% 4 years
Decision 11	<b>A:</b> 100% 16 years, 0% 12 years	<b>B:</b> 100% 19 years, 0% 4 years

End Phase II

### Appendix E: Equity task for subjects in real rewards groups

[These are the instructions for Part 3 of the experiment. The original instructions were presented in Spanish; the following is a translated version. These instructions were identical for all groups with real payoffs that were assigned to health context 1 (health gains in years of life in perfect health), except for the order effects included between frames (skewed high or skewed low) and parts (tasks to elicit risk aversion with health as outcome versus tasks to elicit equity preferences). The results of this equity task will be analyzed in a different paper.]

### Phase III

In phase III of the experiment we will ask you to imagine what you would decide in a number of medical situations involving the treatment of a **group of patients**. As you will see, the situation we show you in each case is very simple. We know that in real life medical decisions are much more complex. Try to respond according to what you believe you would do in each of the cases that are presented.

Suppose you are responsible for deciding which treatment should be provided to a population of <u>middle-aged adult patients</u> that have been diagnosed with certainty. Your choice will be the treatment protocol all physicians in your area will follow. There are two types of patients, type A and type B, both suffering from the same illness. You have to choose between two possible treatments (A and B). Treatment A is better for type A patients, while treatment B is more appropriate for type B patients. That is:

Increase in life expectancy		Treatment	
		А	В
Type of patient		16 years of life	4 years of life
		12 years of life	39 years of life

- If a type A patient receives treatment A, then his life expectancy increases by 16 years.
- If a type B patient receives treatment A, then his life expectancy increases by 12 years.
- If a type A patient receives treatment B, then his life expectancy increases by 4 years.
- If a type B patient receives treatment B, then his life expectancy increases by 39 years.

The patient will enjoy good health during the additional years of life.

Notice that in this scenario:

- 1. There is no way to know a patient's type.
- 2. Once you provide one treatment, you cannot provide the other.

We present 11 different choices with different population compositions. For simplicity, we assume there are 100 patients. We ask you to tell us what treatment the health system should choose to treat these patients in each of the 11 situations.

Next, we show the screenshot of the decisions that you will face at this phase.

	Patient composition	Treatment A	Treatment B
Decision 1	100 Type A	All patients gain 16 years	All patients gain 4 years
Decision 2	90 Туре А	90 patients A gain 16 years	90 patients A gain 4 years
	10 Туре В	10 patients B gain 12 years	10 patients B gain 39 years
Decision 3	80 Туре А	80 patients A gain 16 years	80 patients A gain 4 years
	20 Туре В	20 patients B gain 12 years	20 patients B gain 39 years
Decision 4	70 Туре А	70 patients A gain 16 years	70 patients A gain 4 years
	30 Туре В	30 patients B gain 12 years	30 patients B gain 39 years
Decision 5	60 Туре А	60 patients A gain 16 years	60 patients A gain 4 years
	40 Туре В	40 patients B gain 12 years	40 patients B gain 39 years
Decision 6	50 Type A	50 patients A gain 16 years	50 patients A gain 4 years
	50 Type B	50 patients B gain 12 years	50 patients B gain 39 years
Decision 7	40 Туре А	40 patients A gain 16 years	40 patients A gain 4 years
	60 Туре В	60 patients B gain 12 years	60 patients B gain 39 years
Decision 8	30 Туре А	30 patients A gain 16 years	30 patients A gain 4 years
	70 Туре В	70 patients B gain 12 years	70 patients B gain 39 years
Decision 9	20 Туре А	20 patients A gain 16 years	20 patients A gain 4 years
	80 Туре В	80 patients B gain 12 years	80 patients B gain 39 years
Decision	10 Туре А	10 patients A gain 16 years	10 patients A gain 4 years
10	90 Туре В	90 patients B gain 12 years	90 patients B gain 39 years
Decision 11	100 Type B	All patients gain 12 years	All patients gain 39 years

At the end of the experiment, the computer will randomly choose one of the 32 participants to compute the payments of this phase of the experiment. If you are selected, the computer will randomly choose the decision that will determine the consequences of your choice (treatment A or B). As before, the choices you make in this phase will benefit real patients. In particular, the money earned with your decisions will fund treatments in 10 rural health centers that Vicente Ferrer Foundation manages in the district of Anantapur. We assign a number to each health care center in order to assign the amount of money to be transferred to each of them. In particular, the donation that will be received by each of the health care centers will be based on the health gains obtained by every ten patients. Suppose for instance that the computer randomly selects the following decision:

	90 Type A	90 patients A gain 16 years	90 patients A gain 4 years	
Decision 2	10 Type B		10 patients B gain 39 years	

In this case:

- If you have chosen treatment A, 90 patients gain 16 years of life and 10 patients 12 years. Thus, 9 health centers (those numbered 1 to 9) will receive 16 euros and health center number 10 will receive 12 euros.
- If, on the contrary, you choose treatment B, then 90 patients gain 4 years of life and 10 patients gain 39. In this case health centers numbered 1 to 9 will receive 4 euros and health center number 10 will receive 39 euros.

Once the experiment is over, we will send to the Vicente Ferrer Foundation the money and the instructions corresponding to the allocation of funds for each of the health care centers.

In what follows we ask you to tell us which treatment you would choose in each of the following 11 decisions.

	Patients' composition	Treatment A	Treatment B
Decision 1	100 Type A	All patients gain 16 years	All patients gain 4 years
Decision 2	90 Type A	90 patients A gain 16 years	90 patients A gain 4 years
	10 Type B	10 patients B gain 12 years	10 patients B gain 39 years
Decision 3	80 Type A	80 patients A gain 16 years	80 patients A gain 4 years
	20 Type B	20 patients B gain 12 years	20 patients B gain 39 years
Decision 4	70 Туре А	70 patients A gain 16 years	70 patients A gain 4 years
	30 Туре В	30 patients B gain 12 years	30 patients B gain 39 years
Decision 5	60 Туре А	60 patients A gain 16 years	60 patients A gain 4 years
	40 Туре В	40 patients B gain 12 years	40 patients B gain 39 years
Decision 6	50 Type A	50 patients A gain 16 years	50 patients A gain 4 years
	50 Type B	50 patients B gain 12 years	50 patients B gain 39 years
Decision 7	40 Type A	40 patients A gain 16 years	40 patients A gain 4 years
	60 Type B	60 patients B gain 12 years	60 patients B gain 39 years
Decision 8	30 Туре А	30 patients A gain 16 years	30 patients A gain 4 years
	70 Туре В	70 patients B gain 12 years	70 patients B gain 39 years

Decision 9	20 Туре А	20 patients A gain 16 years	20 patients A gain 4 years
	80 Туре В	80 patients B gain 12 years	80 patients B gain 39 years
Decision	10 Туре А	10 patients A gain 16 years	10 patients A gain 4 years
10	90 Туре В	90 patients B gain 12 years	90 patients B gain 39 years
Decision 11	100 Туре В	All patients gain 12 years	All patients gain 39 years

End Phase III