

# Strategic Research Agenda for cardiovascular disease (SRA-CVD) - Prioritisation consultation

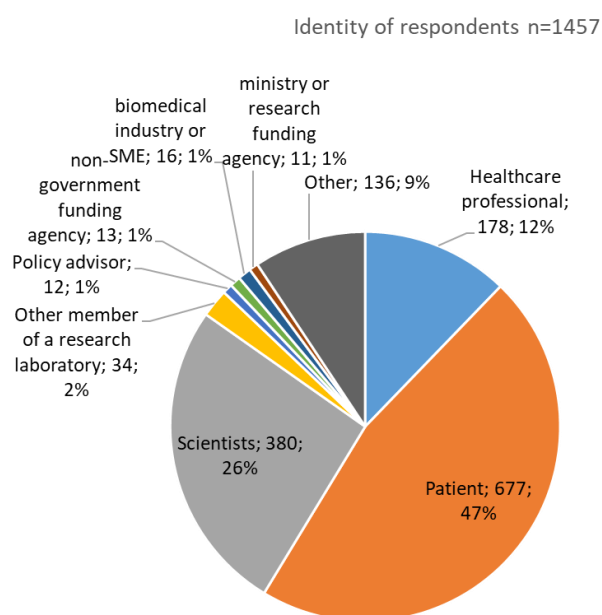
## 1. Introduction

Following the release of the European Research Area Network on Cardiovascular Diseases (ERA-CVD) Strategic Research Agenda for cardiovascular disease ([SRA-CVD](#)), everyone involved or affected with CVD was invited to fill out an online survey. The objective was to prioritise the 15 research domains highlighted in SRA-CVD. Different channels were used to communicate the consultation, including ERA-CVD partners, the European Society of Cardiology (ESC) and the 2019 ESC Congress and the European Heart Network (EHN). Here we summarize the main outcomes of this consultation.

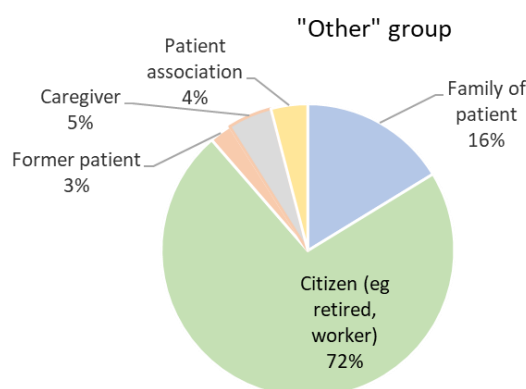
## 2. Panel of participants

Overall, **1457 participants** completed the ERA-CVD online survey. As illustrated in Figure 1A, the largest group of respondents are patients and citizens (56% of respondents). Scientists and healthcare professionals form the second large group (38%). Citizens and patient family members are represented in the group named "Other" (Figure 1 B).

A

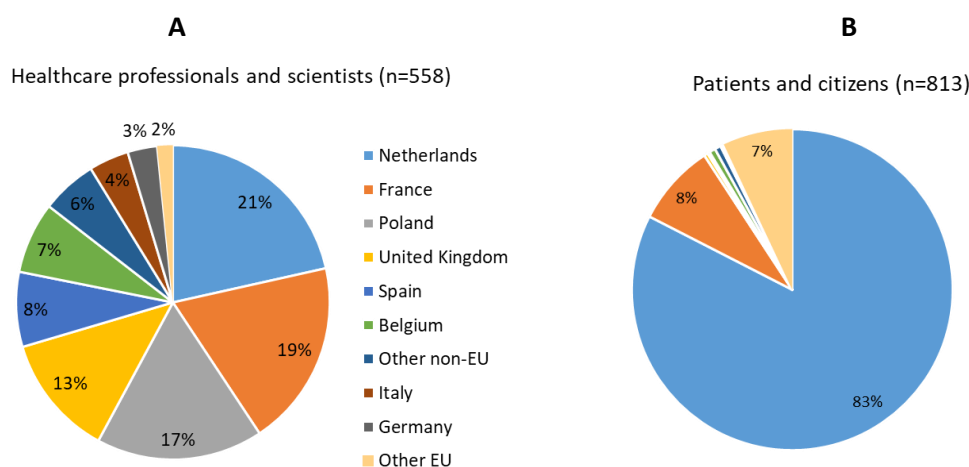


B



**Figure 1** Distribution of all respondents according to their self-described primary occupation (A)  
The group labelled "Other" comprises mostly citizens and family of patients (B)

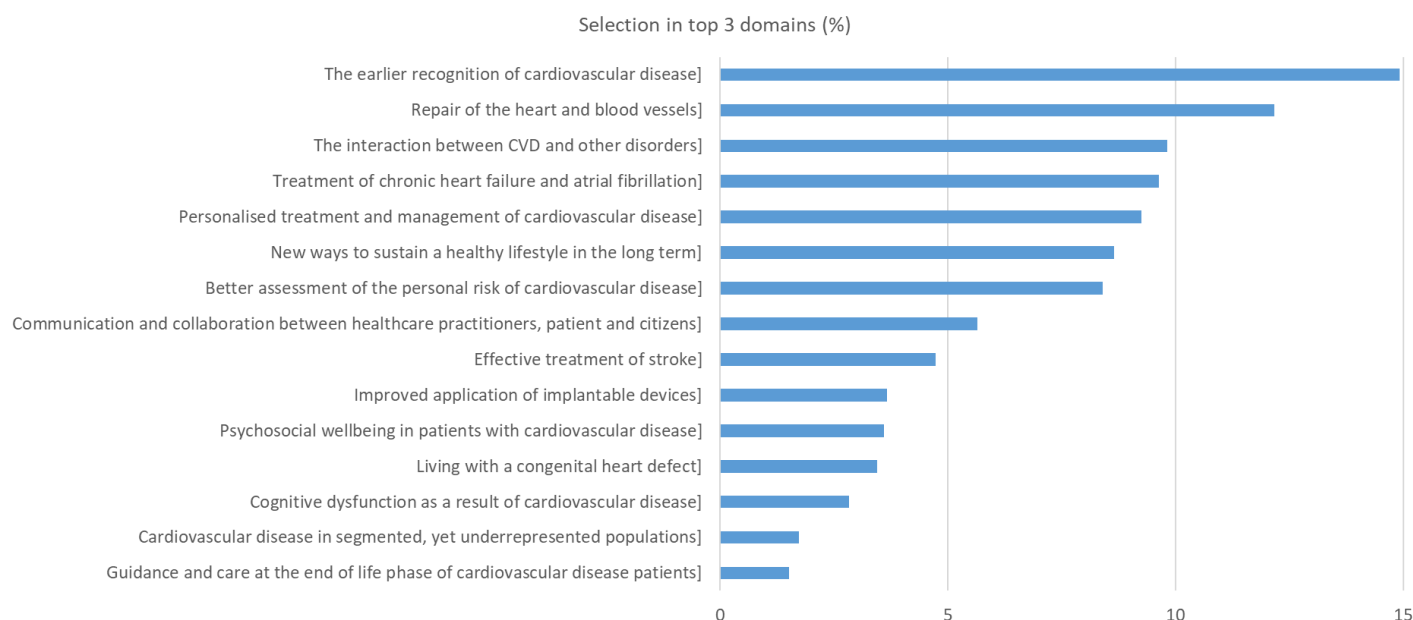
The scientific and healthcare communities were responding from across the EU (Figure 2A) whereas the vast majority of patients and citizens were from the Netherlands, followed by France, Poland and Germany (Figure 2B).



**Figure 2** Country of healthcare professionals and scientists (A), of patient and citizens (B)

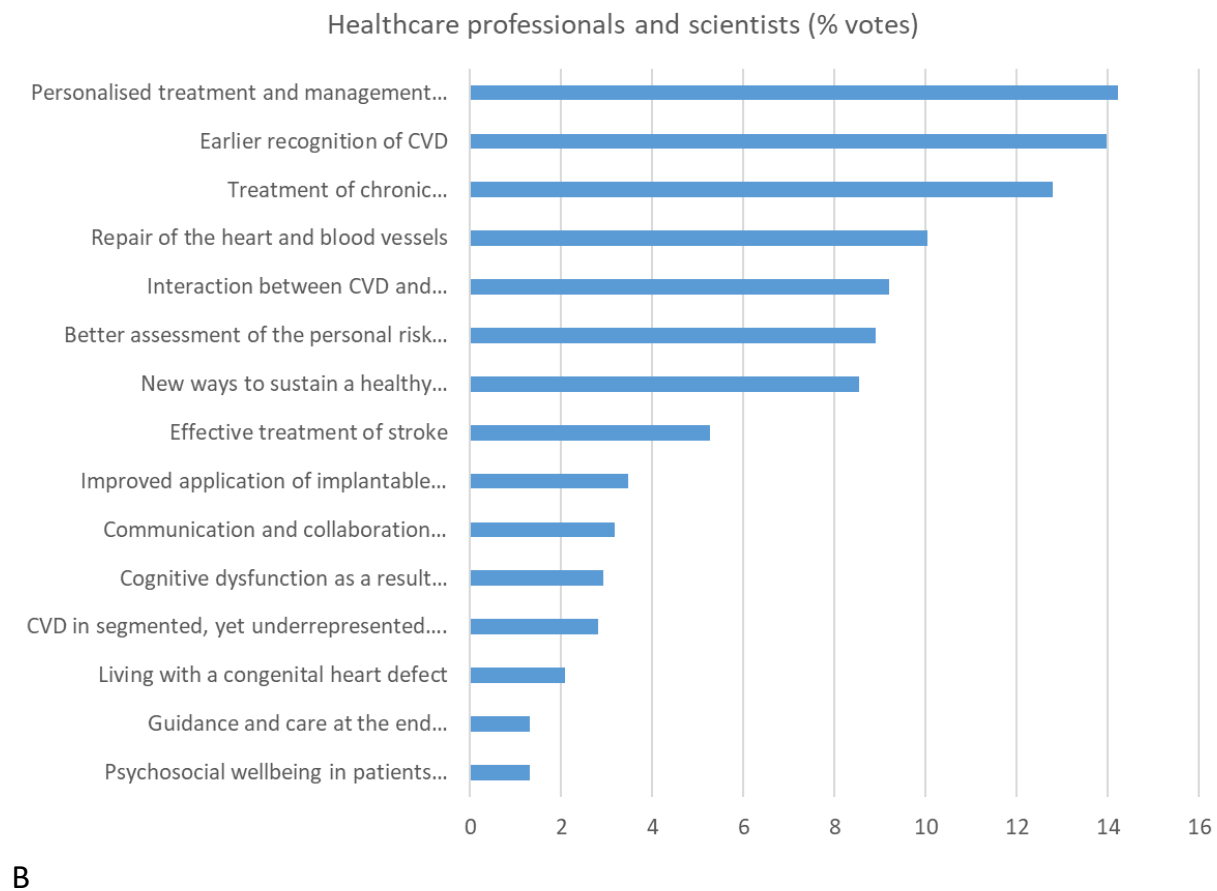
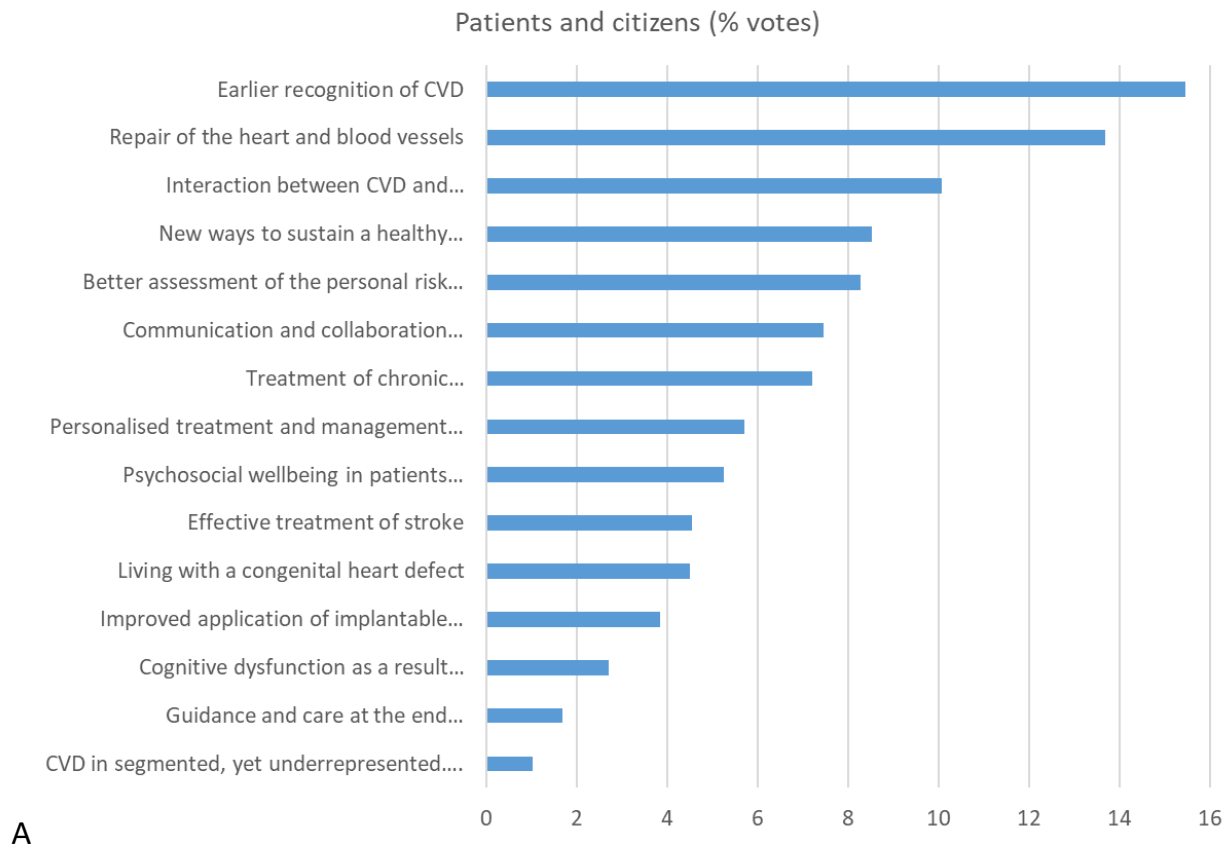
### 3. Prioritisation of domains

The first ranking question was “Choose the 3 research domains that you think are the most important to do research on and improve in cardiovascular health care”. The full description of each domain was available in the questionnaire. Respondents could select 3 (and only 3) research domains among the 15 listed. Results are shown in Figure 3.

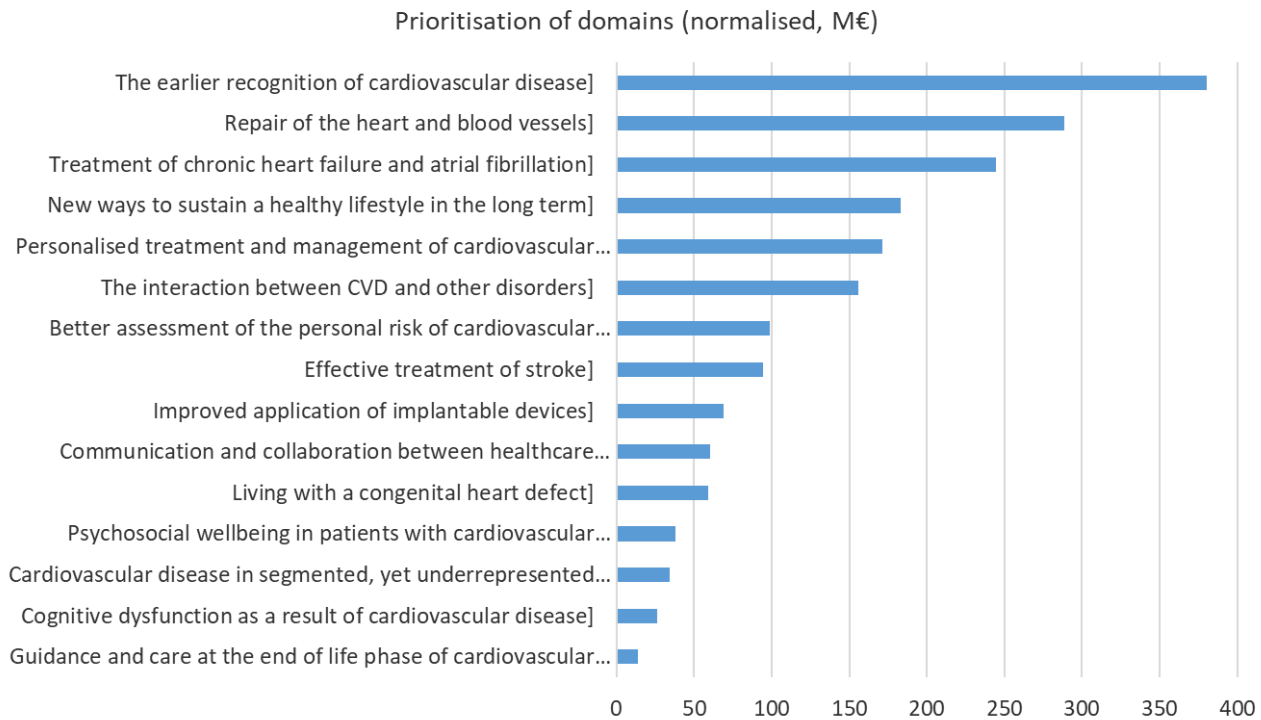


**Figure 3** Domains chosen in top three (% total votes)

Among the 15 research domains in SRA-CVD, “The earlier recognition of CVD” and “Repair of the heart and blood vessels” are the most chosen as top 3 domains (15% and 12.5% of total votes, respectively). We next analysed whether this prioritization of domains was different between the groups of respondents. Patients and citizens tend to choose “Earlier recognition of CVD” and “Repair of the heart and blood vessels” the most (Figure 4A). Healthcare professionals and scientists tend to prioritise “Earlier recognition of CVD”, “Personalized treatment and management of CVD” and “Treatment of chronic heart failure and atrial fibrillation” (Figure 4B). The top 3 domain which is prioritised in both groups is “Earlier recognition of CVD”.



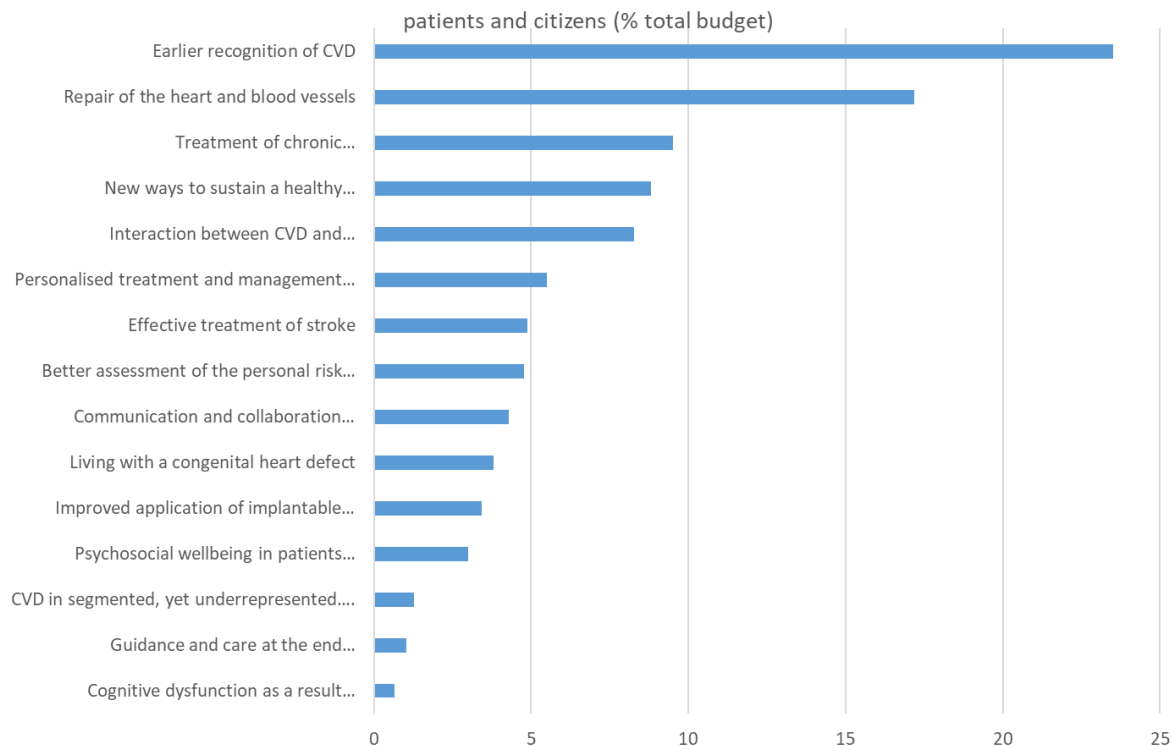
**Figure 4** Votes for top 3 domains in groups of patients and citizens (A), healthcare professionals and scientists (B)  
In order to refine the prioritisation of domains, we asked participants to divide a fixed budget between each of their previously chosen top 3 domains, according to their importance (Figure 5).



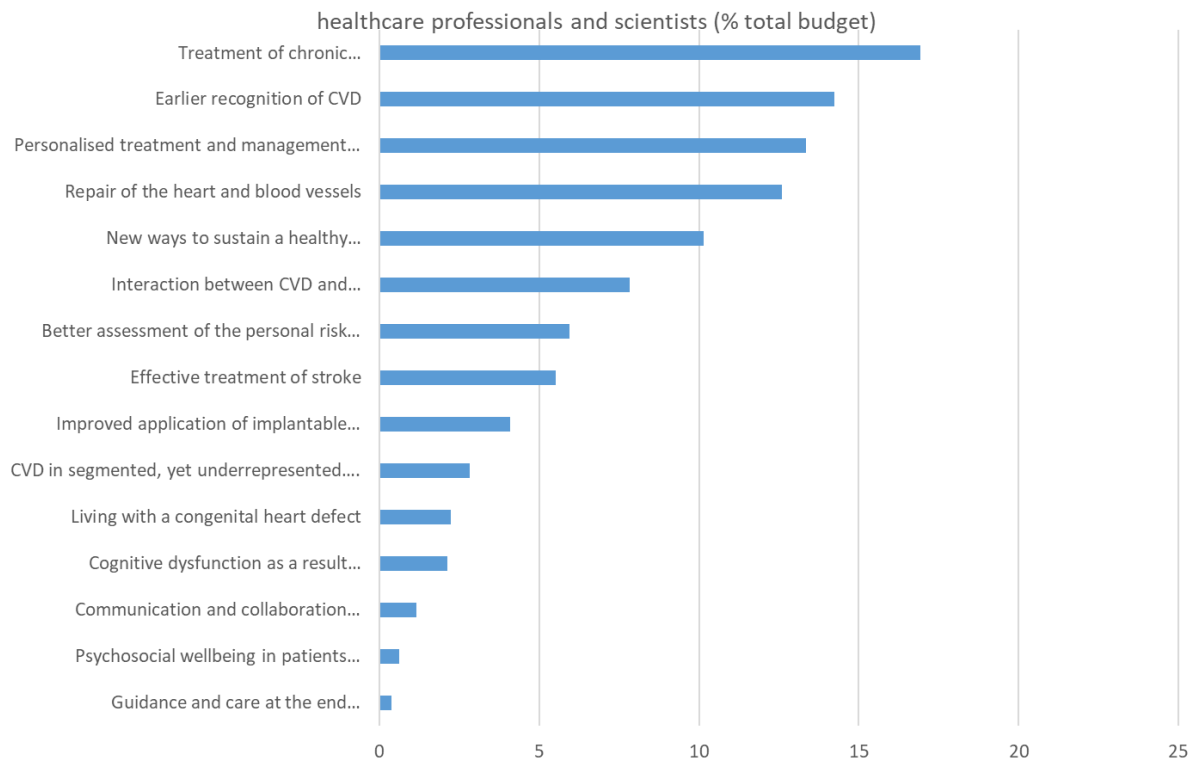
**Figure 5.** Budget allocated to top 3 domains (total all respondents)

This numerical ranking method provides another view on the prioritisation of all domains and shows that overall; the domain “Earlier recognition of CVD” earns the highest priority. However, different groups of participants have different prioritisation (Figure 6).

A



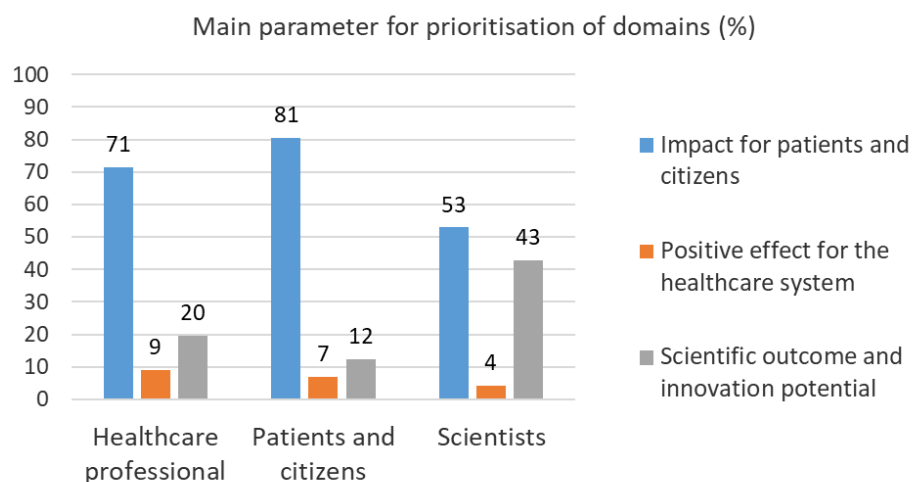
B



**Figure 6** Ranking of the top 3 domains of patients and citizens (A), healthcare professionals and scientists (B)

Patients and citizens clearly prioritise “Earlier recognition of CVD” and “Repair of the heart and blood vessels” (Figure 6A). The prioritisation by healthcare professionals and scientists is less clear-cut (Figure 6B). This group prioritises “Treatment of chronic heart failure and atrial fibrillation”, then with little alterations “Earlier recognition of CVD”, “Personalised treatment and management of CVD” and “Repair of the heart and blood vessels”.

Lastly, we asked participants which of the three given reasons could have motivated their choice. The main parameter for prioritisation of domains is the impact for patients and citizens. Scientists likewise use impact as guidance, but gain of knowledge is an almost equal driver (Figure 7).



**Figure 7** Ranking of the main parameter guiding prioritisation within the different groups of participants

#### 4. Conclusions

The outcome of this survey is a prioritisation of the 15 CVD research domains proposed in the strategic research agenda SRA-CVD. These domains correspond to unmet needs that should be tackled in order to address the increasing burden of CVD by taking advantage of existing and emerging innovative developments and new opportunities.

The given list is topped by risk detection and early treatment as well as the need for innovative treatments for chronic cardiovascular disease, followed by health promotion and more personalised cardiovascular medicine. ERA-CVD, the European Society of Cardiology (ESC), the European Heart Network (EHN) and the European Commission (EC) will now consider the SRA-CVD and the findings of this consultation for future activities, such as a source for funding measures targeting CVD research at the regional, national and European level.

*Paris, December 2019*