

## Supplementary Material

## 1 Supplementary Tables

Table S1. Differences by type of advanced therapy (gene therapies versus cell and tissue therapies)

| Design and methodology of the pivotal trial          | Gene Therapies | Non-Gene<br>Therapies |
|--|----------------|-----------------------|
| Mean (SD) number of pivotal clinical trials          | 1,27 (0,65)    | 1,14 (0,38)           |
| Phase of the trials                                  | <u> </u>       |                       |
| Phase 1, Phase 1/2, Phase 2 and retrospective trials | 7              | 3                     |
| Phase 2/3 and Phase 3 <sup>1</sup>                   | 7              | 6                     |
| Type of control                                      |                |                       |
| Non-controlled <sup>2</sup>                          | 13             | 3                     |
| Placebo or active controlled                         | 1              | 6                     |
| Randomisation  |                |                       |
| Yes  | 2              | 6                     |
| No   | 12             | 3                     |
| Blinding design                                      |                |                       |
| Open   | 14             | 7                     |
| Single or double                                     | 0              | 2                     |
| Blinding evaluation                                  | <u> </u>       |                       |
| Yes  | 2              | 7                     |
| No   | 12             | 2                     |
| Multicentre  | <u> </u>       |                       |
| Yes  | 11             | 9                     |
| No   | 3              | 0                     |
| Number of arms                                       | <u> </u>       |                       |
| 1 arm  | 11             | 2                     |
| ≥ 2 arms   | 3              | 7                     |
| Design   |                |                       |
| Parallel   | 2              | 6                     |
| Other <sup>3</sup>                                   | 12             | 3                     |
| Type of objective                                    |                |                       |
| Superiority and non-inferiority                      | 1              | 6                     |
| Other  | 13             | 3                     |
| Main outcome   | ·              |                       |
| Final variable                                       | 2              | 3                     |
| Intermediate variable                                | 12             | 6                     |
| Type of primary variable                             |                |                       |
| Number of quantitative variables                     | 13             | 4                     |
| Number of qualitative variables                      | 2              | 5                     |
| Health-related quality of life variables             |                |                       |
| Yes  | 9              | 7                     |
| No   | 7              | 3                     |

Sample size (n=17): Gene therapies (n= 10), non-gene therapies (n=7). Non-gene therapies comprise both cell and tissue engineered medicinal products. <sup>1</sup> Including 1 retrospective study; <sup>2</sup> Including historical controls and "other" studies; <sup>3</sup> Including single, crossover and "other" studies. SD: standard deviation.