Appendix 1 - Total list of indicators analysed by the experts.

Question 1 - In your perception, based on your clinical practice, management experience or contact with associates, what needs remain to be met in the prevention of COVID-19 in immunocompromised individuals (ICI)?

- 1. Raising awareness among the general population about COVID-19 and its consequences
- 2. Raising awareness among ICI about COVID-19 and its consequences
- 3. Raising awareness among health professionals about COVID-19 and its consequences
- 4. Raising awareness among the general population about the results of vaccination
- 5. Raising awareness among ICI about the results of vaccination
- 6. Raising awareness among the general population about current prevention measures
- 7. Having more effective vaccines for ICI
- 8. To have vaccination regimens suitable for different groups of ICI
- 9. Developing monoclonal antibodies capable of neutralizing current variants
- 10. Easier access to antivirals a
- 11. Effective access to monoclonal antibodies a
- 12. Dissemination of the results of undesirable effects/adverse reactions of vaccination in ICI, in a manner appropriate to the different levels of literacy and numeracy ^a
- 13. Knowing the Breakthrough COVID incidence a
- 14. Knowing the incidence of serious infections a
- 15. Knowing the % of infected immunosuppressed patients who had access to antiviral therapy a
- 16. Vaccine immunogenicity ^a
- 17. To have vaccine regimens developed and evaluated specifically for immunosuppressed patients ^a
- 18.Developing monoclonal antibodies that are active against current strains and, if possible, directed against antigenic determinants that are not very susceptible to mutations ^a
- 19. Modulation of immunosuppression in the event of viral infection ^a
- 20. Availability of antivirals with no potential for drug interaction with immunosuppressants a
- 21. Developing a vaccine with greater immunogenicity a
- 22.Raising awareness among immunosuppressed patients to get vaccinated against COVID-19 a
- 23. Raising awareness among ICI about the COVID-19 immunization schedule and regimen a
- 24. Understanding and knowing the concept of "immunocompromised"

- 25. Distinguish between immunosuppressed people (people with normal basic immunity who are on immunosuppressive medication) and immunomodulated people (people who are ill with immune-mediated diseases and who are on immunosuppressive therapy, in this case immunomodulatory therapy) ^a
- 26. Identify ideal vaccination timings depending on the immunosuppressive/immunomodulatory medication taken, namely the need to temporarily suspend it and/or fit vaccination into its interval (in the case of non-daily medication) ^a

Question 2 - Who do you consider to be immunocompromised individuals (ICI), i.e. which ICI characteristics are related to COVID 19 susceptibility?

- 1. People undergoing chemotherapy (CT) and/or radiotherapy (RT)
- 2. People with overlapping immunodepression factors
- 3. People taking immunosuppressive drugs
- 4. People with chronic renal failure (CRF)
- 5. People on hemodialysis (HD)
- 6. People with Primary Immunodeficiencies (PI)
- 7. People with autoimmune pathologies, particularly rheumatological diseases
- 8. People living with Human Immunodeficiency Virus (HIV) infection, undergoing treatment and with a stable profile
- 9. People living with Human Immunodeficiency Virus (HIV) infection, without treatment and with a non-stable profile
- 10. People undergoing solid organ transplantation
- 11. People with cancer in general
- 12. People with blood neoplastic disease
- 13. Elderly people
- 14. Patients recently treated with rituximab ^a
- 15. Ibrutinib patients a
- 16. Patients treated with CAR T cells ^a
- 17. Bone marrow transplant patients ^a
- 18. Pregnant women ^a
- 19. People taking lymphocyte-depleting drugs (anti-CD20) a
- 20. People on immunosuppressive treatments, depending on the dose ^a

Question 3 - Currently, in your perception, what do you consider to be the main outcomes of COVID-19 in immunocompromised individuals (ICI)?

- 1. Severe infection requiring oxygen therapy
- 2. Severe infection requiring ventilation

- 3. Severe COVID-19 disease with serious complications
- 4 Persistence of severe COVID-19 cases
- 5. Significant consumption of resources in Intensive Care Medicine when people develop critical COVID-19
- 6. Prolonged hospitalization when people develop critical COVID-19
- 7. High mortality rates
- 8 Intensive care admissions for severe/critical COVID-19
- 9. Hospitalizations for COVID-19
- 10. Existence of sequelae that are difficult to manage after having severe COVID-19
- 11. No current data on clinical outcomes
- 12. Lack of current data on hospitalization rates
- 13. Lack of current data on the rate of admissions to intensive care units
- 14. Lack of current data on mortality rates
- 15. No current data on severe COVID-19
- 16. Existence of an improvement in the current situation compared to the past, regarding the clinical outcomes of COVID-19
- 17. Existence of an improvement in the current situation compared to the past regarding hospitalizations
- 18. Existence of an improvement in the current situation compared to the past, regarding mortality rate
- 19. Existence of an improvement in the current situation compared to the past, regarding severe COVID-19
- 20. Non-significant hospitalization rate in the immunocompromised population
- 21. Non-significant mortality rate in the immunocompromised population
- 22. Non-significant incidence rate of severe COVID-19 in the immunocompromised population
- 23. Non-significant incidence rate of COVID-19 in the immunocompromised population
- 24. Non-significant severity of COVID-19 in the immunocompromised population
- 25. Immunocompromised individuals, when infected, have a longer excretion time of the virus, leading to a greater likelihood of the emergence of genetic mutations of the virus ^a

Question 4 - Regarding the need to prevent COVID-19 in immunocompromised individuals (ICI), what action strategies do you consider most effective to protect this population?

- 1. Maintaining epidemiological surveillance of COVID-19
- 2. Promote health literacy about COVID-19 and vaccination among the general population

- 3. Promote health literacy on COVID-19 and vaccination among the immunocompromised population
- 4. Promote the use of measures to prevent the transmission of infection (hand washing) among immunocompromised individuals (ICI)
- 5. Promote the use of measures to prevent the transmission of infection (masks) in ICI
- 6. Promote the use of measures to prevent the transmission of infection (social distancing) in ICI
- 7. Promote the use of measures to prevent infection transmission (COVID-19 testing) in ICI
- 8. Promote the use of measures to prevent infection transmission (masks) by healthcare professionals
- 9. Promote vaccination in ICI
- 10. Have monoclonal antibodies available targeting circulating variants
- 11. Maintain investment (research) in vaccination: more effective and specific vaccines
- 12. Prioritize access for immunocompromised individuals to vaccination or drugs that provide greater protection
- 13. Facilitate the chain, from prescription to administration, of effective therapies for the prevention of infection (prophylaxis)
- 14. Promoting the development of monoclonal antibodies that do not interact with immunosuppressants ^a
- 15. Promoting the development of antiviral therapies that do not cause interactions with immunosuppressants ^a
- 16. Action strategies aimed at different sub-groups of ICI, groups that are more homogeneous (e.g. Distinguishing different levels of severity; of need for intervention depending on this assessment of severity; of the pathology and the medication taken) ^a
- 17. The use of infection prevention measures such as masks or social distancing should be used in a context of greater risk (e.g. greater circulation of viruses), and not systematically ^a

a Indicators highlighted in grey were added by experts in the second round