

Scandiatransplant ID group report 2023-2024

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Chair Scandiatransplant ID group

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Tasks and obligations – 1

- **Infectious disease group:** This is a **scientific advisory group** and should consist of **specialists in infectious diseases and/or clinical microbiology with special interest in organ transplantation, clinical active transplant clinicians, at least one active transplant surgeon and member of the Scandiatransplant Board.** The composition of expertise in the group should cover all main fields within infectious diseases and there should preferably be **at least one member from each country.**

List of members

Country	Name	email
Denmark	Susanne Dam Poulsen (chair)	Susanne.dam.poulsen@regionh.dk
Denmark	Claus Moser	Claus.moser@regionh.dk
Denmark	Søren Jensen-Fangel	soejense@rm.dk
Estonia	Anne Kallaste	anne.kallaste@kliinikum.ee
Finland	Ilkka Helanterä	Ilkka.Helanterä@hus.fi
Iceland	Bryndís Sigurðardóttir	bryndsig@landspitali.is
Latvia	Viesturs Zvirbulis (observer)	viesturs.zvirbulis@stradini.lv
Norway	Ingvild Nordøy	inno2@online.no
Sweden	Helena Hammarström	helena.hammarstrom@infect.gu.se
Sweden	Ola Blennow	ola.blennow@regionstockholm.se
Sweden	Magnus Lindh	magnus.lindh@microbio.gu.se
Sweden	Gisela Otto	gisela.otto@skane.se
Secretary	Moises Suarez-Zdunek	moises.alberto.suarez.zdunek@regionh.dk
Member of Scandiatransplant Board and surgeon	Morten Hagness	mhagness@ous-hf.no
Scandiatransplant Office	Ilse Duus Weinreich	ilse.duus.weinreich@scandiatransplant.org

Tasks and obligations – 2

The main duty of the group is to **ensure updated guidelines regarding transmission of infectious disease in organ transplantation**. These guidelines should be reviewed and **updated every year...**

The group should also function **as a network for consultation concerning infectious diseases in organ donation and transplantation within the Scandiatransplant area**. The group may also be used to discuss and guide prevention and treatment of infectious diseases in transplant candidates and recipients in the Scandiatransplant area and for research purposes.

ID group activities and visions

December 5th, 2023: Online meeting

April 11, 2024: On site meeting Copenhagen Airport

Visions for the guideline:

- Always updated and aligned with EDQM
- All centers should have the ability to perform recommended tests
- All centers should perform the recommended tests



Overview of revisions to ScandiTransplant guidelines on donor screening for infectious diseases

Major changes (highlighted in yellow)

- 1) Clarified that the centre performing the donor screening is responsible for storing donor serum and bacterial/fungal species.
- 2) New recommendation to strongly consider running and obtaining HIV and HCV NAT results before organ procurement and before offering the organs in specified risk groups, in accordance with EDQM.
- 3) Revised guidelines on TB in donors.

Minor changes (highlighted in green)

- 1) Unified nomenclature for antibodies to anti-[pathogen] and nucleic acid amplification tests to NAT (when unspecified if PCR, LAMP, PCR, or other NAT is preferred) or PCR (when PCR is normally preferred).
- 2) Specifying that "recipients without HBV markers" means "HBV-naive anti-HBs-negative recipients".
- 3) Removed anti-CMV IgM from the table of tests that should be taken before donation in accordance with section 1 that did not specify that anti-CMV IgM are necessary.
- 4) Extending recommendation that informed consent to use of organs from donors with signs of "viral hepatitis" should also apply to "chronic viral infections" given that the guidelines already allowed organs from donors with other chronic infections (i.e., HIV+ donors to be used in urgent organ need in HIV+ recipients).
- 5) Added an overview of tests performed on indication ("category 3 tests")
- 6) Changed the term septicaemia to bacteraemia, reflecting modern nomenclature and specified that "(near) 'wild type' pattern" of antibiotic/antifungal resistance means "normal resistance pattern".

Editorial changes (not highlighted)

- 1) Added a numbered and hierarchical headline structure for easier overview and access.
- 2) Unified mixed American and British English into British English spelling.
- 3) Applied more concise phrasing according to NICE style guide.
- 4) Corrected other minor language issues

1. RESPONSIBILITIES

The transplantation coordinator is responsible for

- adequate tests being requested and performed according to the protocol
- the results being forwarded to the surgeon in charge of grafting.

The surgeon in charge of grafting is responsible for

- the acceptance and the use of the organ, and thus for knowing the results of the performed tests
- acquiring the travelling history of the donor
- judging if a test can be postponed until after grafting
- judging if a mismatch can be accepted for the specific recipient.

Storing of serum: Adequate serum must be stored for 10 years for retrospective testing:

- Recipient centres should store pre-transplant recipient serum.
- Responsible donor testing centre* should store adequate donor serum when one or more organs are used for transplantation. This also applies if all organs are exported to other transplant centres.

Storing of bacterial or fungal species: In case of a donor with an infection with a multidrug-resistant bacterium or fungus, bacterial or fungal species should be stored at the responsible donor testing centre* (often at the local department of clinical microbiology) for potential further susceptibility testing.

*Responsible donor testing centre is defined as the centre performing the donor screening.

2. OVERVIEW OF BASIC SCREENING FOR INFECTIONS IN ORGAN DONORS

Category 1: Before organ procurement and/or transplant:

Anti-HIV, (HIV NAT), HBsAg, anti-HBc, anti-HCV, (HCV NAT), SARS-CoV-2 PCR

Category 2: As soon as possible (not necessarily before organ procurement and/or transplant):

Anti-CMV, anti-EBV, anti-HSV-1/2, anti-Treponema pallidum (syphilis), anti-Toxoplasma

Category 3: In special situations / in certain risk groups:

Tuberculosis (TB) interferon-gamma release-assay, anti-HTLV-I/II, Plasmodium (malaria) PCR/LAMP, anti-Strongyloides, anti-Trypanosoma cruzi (Chagas disease)

3. BASIC SCREENING OF THE DONOR

3.1 Category 1: Screening before organ procurement and/or transplant

The following tests should be run before offering organs: Anti-HIV, HBsAg, anti-HBc, anti-HCV, SARS-CoV-2 PCR.

Additionally, strongly consider HIV NAT and HCV NAT tests before offering organs from donors at increased risk of HIV and HCV infections. Donors are considered at increased risk of HIV and

BASIC SCREENING FOR INFECTIONS IN DONORS

Basic screening for infections in organ donors (further detailed below)

1: Before organ procurement and/or transplant:

Anti-HIV, HBsAg, anti-HBc, anti-HCV, SARS-CoV-2

3.1 Category 1: Screening before organ procurement and/or transplant

The following tests should be run before offering organs: **Anti-HIV, HBsAg, anti-HBc, anti-HCV, SARS-CoV-2 PCR.**

Additionally, strongly consider **HIV NAT** and **HCV NAT** tests before offering organs from donors at increased risk of HIV and HCV infections. Donors are considered at increased risk of HIV and

HCV if one of the following risk criteria exists during the 30 days before organ procurement:

- Sex with a person known or suspected to have HIV, HBV, or HCV infection (i.e., any method of sexual contact, including vaginal, anal or oral)
- Man who has had sex with another man (MSM)
- Sex in exchange for money or drugs
- Sex with a person who had sex in exchange for money or drugs
- Drug injection for nonmedical reasons
- Sex with a person who injected drugs for nonmedical reasons
- Incarceration (confinement in jail, prison or juvenile correction facility) for ≥ 72 consecutive hours
- Child breastfed by a mother with HIV infection
- Child born to a mother with HIV, HBV or HCV infection
- Unknown medical or social history.

Category 2: As soon as possible (not necessarily before organ procurement and/or transplant):

Anti-CMV, anti-EBV, anti-HSV-1/2, anti-Treponema pallidum (syphilis), anti-Toxoplasma

Category 3: In special situations / in certain risk groups:

Tuberculosis (TB) interferon-gamma release-assay, anti-HTLV-I/II, Plasmodium (malaria)

PCR/LAMP, anti-Strongyloides, anti-Trypanosoma cruzi (Chagas disease)

Tuberculosis 2023 to 2024

IGRA test+ (only taken in donors with risk for latent tuberculosis)	If no history of ongoing tuberculosis in the donor, a positive test indicates latent infection or previously treated infection.	Organs can be accepted regardless of IGRA result. Medical history important for interpretation of reactive IGRA test. If untreated latent infection in the donor, treatment of the recipient should be considered, especially for lung recipients. If no treatment is given, clinical monitoring is important.
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Test	Comment
TB interferon-gamma release-assay	Only in donors with risk factors for TB. See section 4.3 Tuberculosis (TB) in deceased organ donors.

*Risk factors for TB:

- Residence in country with high TB prevalence (Latin America, Africa, Asia, Eastern Europe, and Greenland)
- Homelessness
- Alcoholism
- Age >70
- Known TB exposure
- History of previous treatment for active TB or for latent TB
- Chest radiograph showing apical scarring/fibrotic lesion in a donor with other risk factors for TB

Tuberculosis 2024

4.3 Tuberculosis (TB) in deceased organ donors

4.3.1 Donors with active TB

Organs are generally not accepted. If isolated pulmonary TB in donor, consider other organs than lungs in very urgent cases and if not multidrug-resistant TB. Chemoprophylaxis or treatment for active TB in recipient is recommended.

4.3.2 Donors with risk factors* for TB but without signs of active TB

TB interferon-gamma release-assay test is recommended. Results are normally available after transplantation and may help in the decision of whether to give chemoprophylaxis to the recipient.

4.3.2.a Donor history of treatment for active TB but no documented information that can assure a complete treatment course

The organ previously affected by TB should not be accepted. Other organs can be accepted. Infectious disease specialist should be consulted about indication for chemoprophylaxis to the recipients. See Table 6 in Morris et al. (Am J Transpl 2012; 12:2288-2300) for details.

4.3.2.b Donor history of treatment for active TB with assured complete treatment course

All organs can be accepted. Infectious disease specialist should be consulted about indication for chemoprophylaxis to the recipients based on donor history and result of TB interferon-gamma release-assay test where applicable. See Table 6 in Morris et al. (Am J Transpl 2012; 12:2288-2300) for details.

Storing of serum

STORING OF SERUM: Adequate material (sera) for testing and storage in the recipient centre must accompany each organ. Recipient centres should store donor and recipient (pre-transplant) serum (10 years).

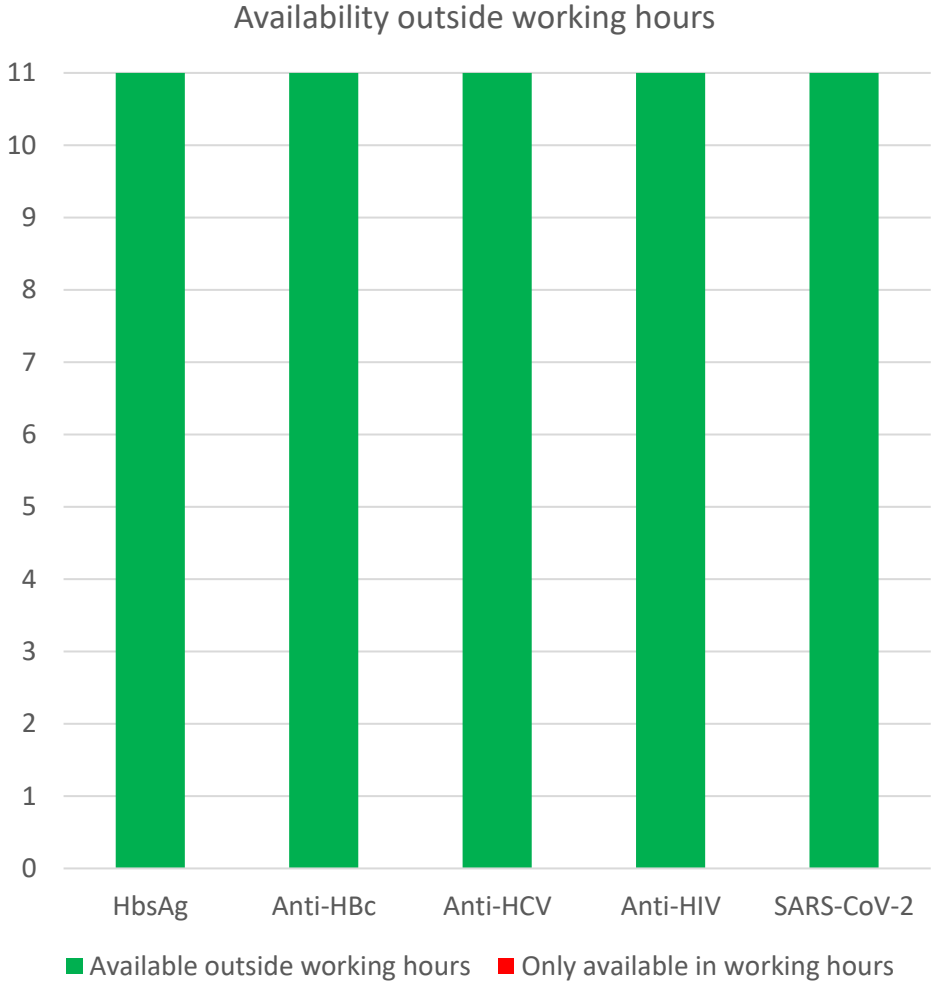
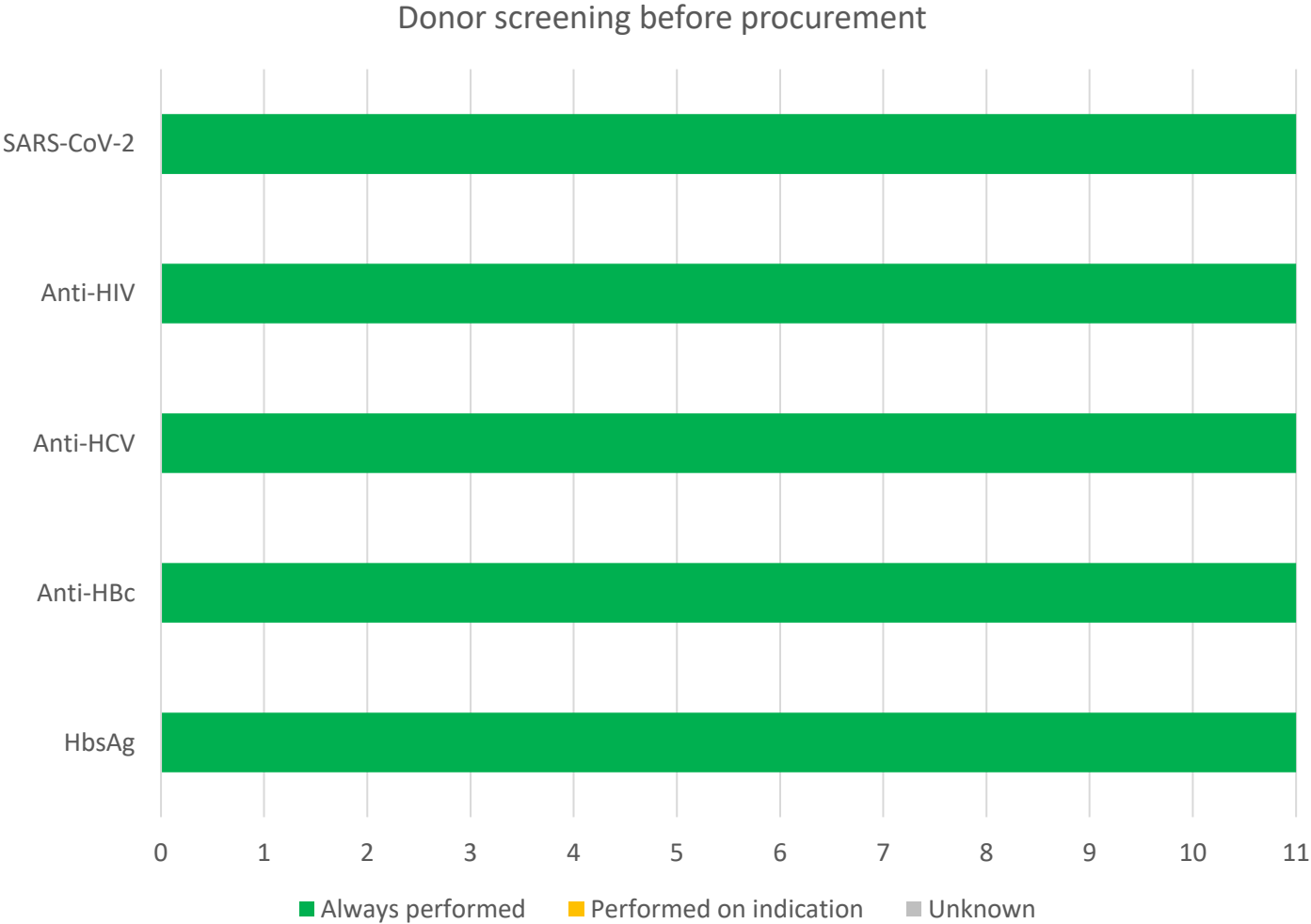
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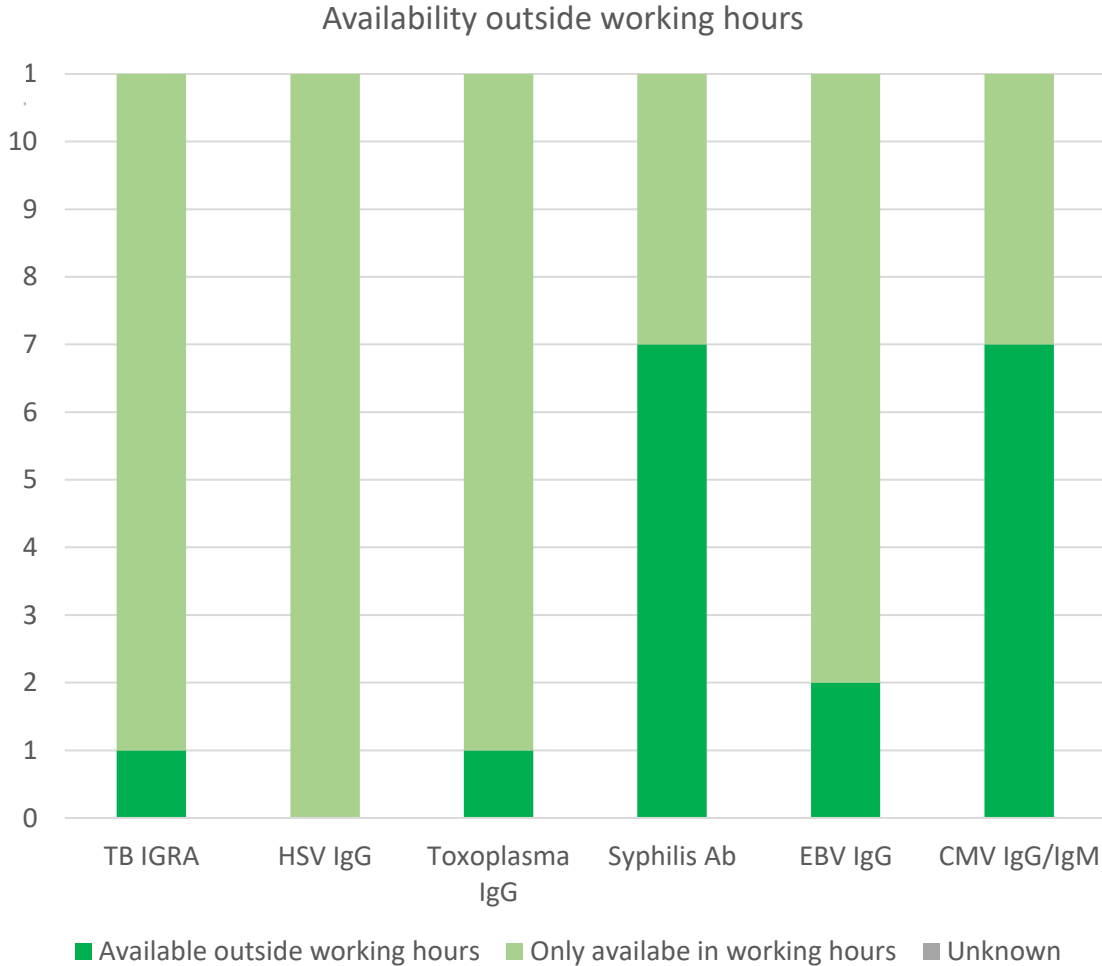
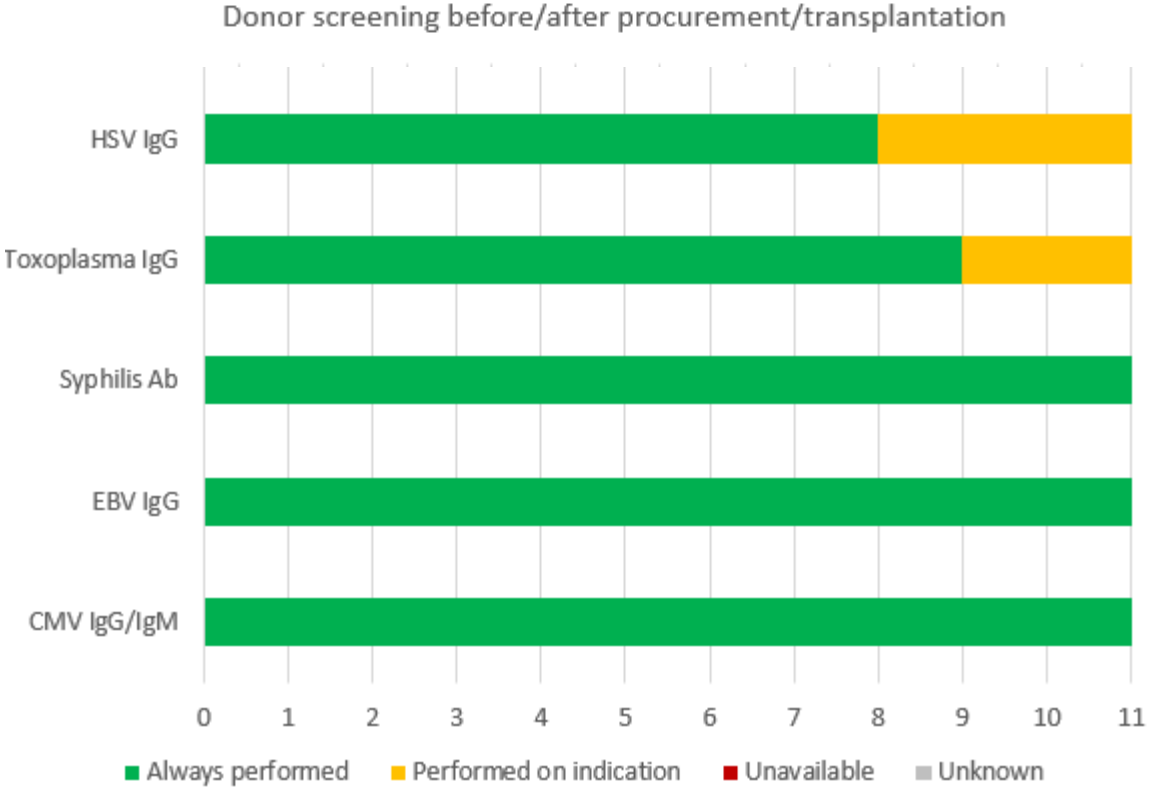
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Basic donor screening before organ procurement and/or transplantation



NB for Odense: Tests other than COVID performed in Aarhus

Basic donor screening as soon as possible (before/after transplantation)



To be
continued

Guideline for respiratory viruses (COVID and influenza) to be discussed and revised at the ID group meeting in September.

For the 2025 ID group meeting, we aim to look at test results for all the recommended test.

The first ID group collaboration (Denmark and Finland) approved and supported by Scandiatransplant.

Other collaborations are in process.

Thank you
for your
attention



AGENDA

- Survey – update and how should we proceed, **Ilse & Susanne**, 45 min
- Tuberculosis, new section? **Helena**, 45 min
- COVID testing of asymptomatic recipients, **Søren**, Ingvild, Morten, Gisela 30 min
- Influenza – new section, **Bryndis**, Ilkka, Susanne 30 min
- **LUNCH 12.30-13.30**
- Update about CMV prevention practices around Scandiatransplant/possible research collaboration **Ola**, Ilkka, Ingvild, Susanne 30 min
- Prophylaxis before pancreas Tx, **Ingvild** 30 min
- RSV vaccination, **Magnus** and Ola, 30 min
- Layout guideline, ID in YASWA, **Ilse** 15 min
- Any other topics