Outstanding challenges in managing infections in the immunocompromised host

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The immunocompromised host:

- Disease
  - Inborn immune deficiencies
  - Acquired immune deficiencies
  - Hematologic/cancer diseases
  - Cystic fibrosis

- Treatment induced
  - Chemotherapy
  - Prednisone
  - Biologic response modifiers

- Transplantation
  - Bone Marrow Transplantation
  - Solid organ transplantation
    - Liver
    - Kidney
    - Lung
    - Heart
    - Pancreas
Ultimate host factor:
Severe Aplastic Anemia = Bone marrow failure:

Death = infection

Survival probability

Group 1
5-yr survival = 23%

Group 2
5-yr survival = 35%

Group 3
5-yr survival = 57%

Non-responders to IST N=174

P < 0.001
Hematologic patients

340 admissions at Rigshospitalet with fever, cough and/or dyspnoe:

All patients had:

- Blood cultures for bacteria
- Sputum cultures for bacteria
- Sputum PCR for 12 respiratory vira

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<tr>
<th>Virus</th>
<th>Bacteria</th>
<th>N</th>
<th>%</th>
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<tr>
<td>Microbial</td>
<td>N</td>
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<tr>
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Thank you