



**Table 5: Potential diagnostic investigations**

Diagnostic investigations	Purpose
<b>Haematological markers</b>	
White blood cell (WBC) counts (e.g., granulocytes, lymphocytes, monocytes)	<ul style="list-style-type: none"> <li>• Detect presence of infection in the body, WBCs indicate an immune response.</li> </ul>
C-reactive protein (CRP)	<ul style="list-style-type: none"> <li>• Detect inflammation related to infection.</li> </ul>
Erythrocyte sedimentation rate (ESR)	<ul style="list-style-type: none"> <li>• Detect inflammation related to infection.</li> </ul>
Blood cultures	<ul style="list-style-type: none"> <li>• Performed to detect an infection in the blood and identify the causative organism(s). A positive blood culture indicates bacteraemia.</li> </ul>
<b>Microbiology<sup>1,2</sup></b>	
Wound culture	<ul style="list-style-type: none"> <li>• Identify causative organism(s) of infection.</li> <li>• Construct antibiogram based on sensitivity testing.</li> </ul>
<b>Radiological investigations<sup>2</sup></b>	
Plain x-rays	<ul style="list-style-type: none"> <li>• Identify presence of osteomyelitis or abscess.</li> </ul>
White cell/bone scan	
Magnetic resonance imaging (MRI)	
Computerised tomography (CT)	
Fluorodeoxyglucose positron emission tomography (PET)	
Leukocyte scintigraphy (with or without CT)	
<b>Ultrasound<sup>3,4</sup></b>	
Ultrasound	<ul style="list-style-type: none"> <li>• Identify extent of abscess, fluid collection or haematoma.</li> </ul>

## Table 05 References

1. Bowler P, Duerden B, and Armstrong DG, Wound microbiology and associated approaches to wound management. Clin Microbiol Rev, 2001 14(2): p. 244-69.
2. Lipsky BA, Senneville E, Abbas ZG, Aragon-Sanchez J, Diggle M, Embil JM, Kono S, Lavery LA, Malone M, van Asten SA, Urbancic-Rovan V, and Peters EJG, Guidelines on the diagnosis and treatment of foot infection in persons with diabetes (IWGDF 2019 update). Diabetes Metab Res Rev, 2020. 36(S1): p. e3280.
3. World Union of Wound Healing Societies, Consensus document. Surgical wound dehiscence improving prevention and outcomes. Wounds International 2018.
4. Barrett CD, Celestin A, Fish E, Glass CC, Eskander MF, Murillo R, Gospodinov G, Gupta A, and Hauser CJ, Surgical wound assessment by sonography in the prediction of surgical wound infections. J Trauma Acute Care Surg, 2016. 80(2): p. 229-36.