7. CONCLUSION

The proposed blockchain-based blood donation management system that traces the origin of the blood in a transparent, private, secure, trustworthy, auditable and decentralized manner. The proposed solution employed the smart contract feature of the private blockchain to record and log events automatically. It integrated the private Ethereum blockchain with the IPFS to deal with the limited storage issue and tested and validated the functionality of the solution using the Remix IDE. It is developed smart contracts code has been made available on the GitHub repository. It is conducted the security analysis to show that the proposed blood donation management solution is robust and secure enough against major security vulnerabilities and attacks. In addition, it is compared to proposed approach with the existing solutions. In future, this proposed system aims is to deploy and test this solution on the real world end-to-end Apps. It is monitored and added to further enhance the security of the blood cold supply.