

Bone & Joint Open

Supplementary Material

10.1302/2633-1462.410.BJO-2023-0055.R1

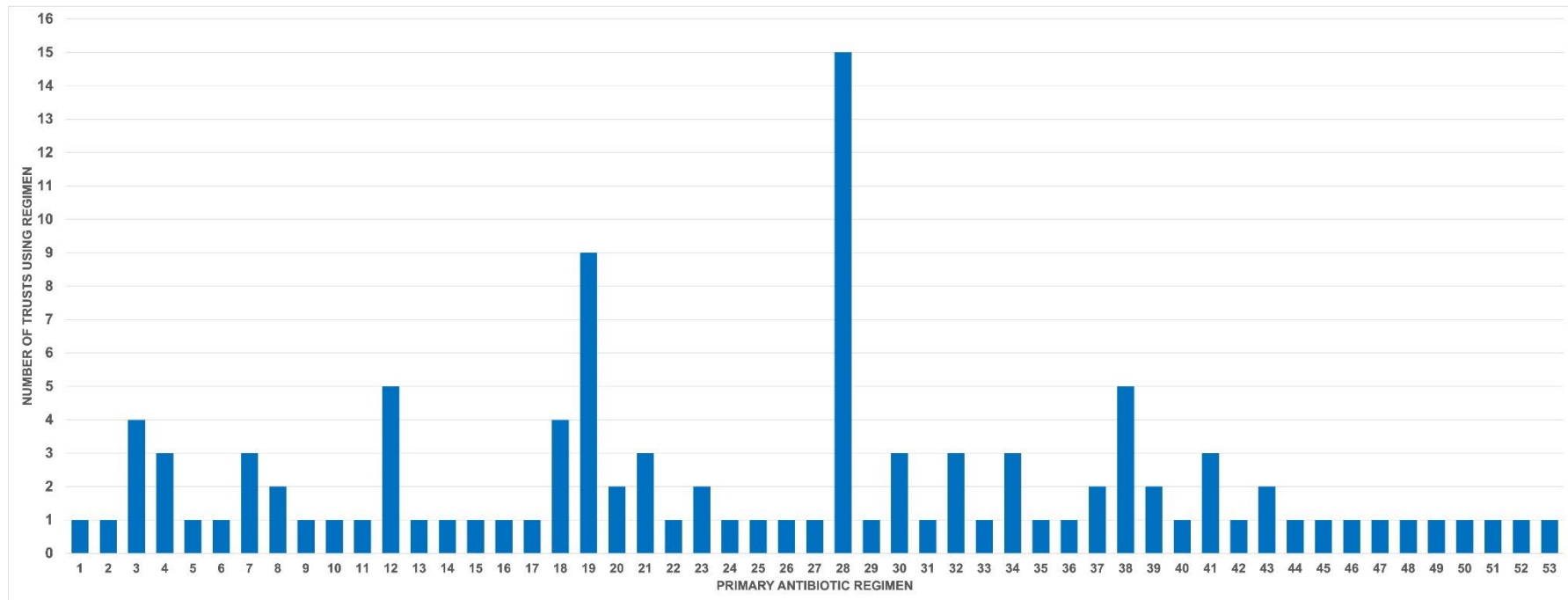


Fig a. Preferred primary antimicrobial prophylaxis regimen. The regimens are described as follows:

- 1) Flucloxacillin 2g and gentamicin 2 mg/kg each, then three doses of flucloxacillin 1 g every six hours.
- 2) Flucloxacillin 1 g, gentamicin 160 mg each, then flucloxacillin 1 g three times six-hourly.
- 3) Flucloxacillin 2 g, gentamicin 160 mg each, then flucloxacillin 1 g three times six-hourly.
- 4) Flucloxacillin 1 g and gentamicin 2 mg/kg, then flucloxacillin 1 g three times six-hourly.
- 5) Flucloxacillin 1 g and gentamicin 3 mg/kg, then flucloxacillin 2 g three times six-hourly.
- 6) Flucloxacillin 1 g and gentamicin 240 mg, then flucloxacillin 1 g three times six-hourly.
- 7) Flucloxacillin 1 g and gentamicin 3 mg/kg, then flucloxacillin 1 g three times six-hourly.
- 8) Flucloxacillin 1 g and gentamicin 160 mg, then flucloxacillin 1 g three times six-hourly.
- 9) Flucloxacillin 1 g and gentamicin 1.5 mg/kg, then three doses of flucloxacillin 1 g six-hourly.
- 10) Flucloxacillin 1 g and gentamicin 3 mg/kg, then three doses of flucloxacillin 1 g six-hourly.
- 11) Cefuroxime 1.5 g and gentamicin 120 mg, then two doses of cefuroxime 1.5 g eight-hourly.
- 12) Cefuroxime 1.5 g, then three doses of cefuroxime 750 mg eight-hourly.
- 13) Flucloxacillin 1 g then three doses of flucloxacillin 1 g six-hourly.
- 14) Flucloxacillin 1 g, flucloxacillin 2 g, gentamicin 160 mg, gentamicin 240 mg, then two doses of flucloxacillin 1 g six-hourly.
- 15) Flucloxacillin 1 g and gentamicin 160 mg, then two doses of flucloxacillin 1 g six-hourly.
- 16) Cefuroxime 1.5 g and cefuroxime 750 mg three doses eight-hourly.
- 17) Teicoplanin 10 mg/kg and gentamicin 160 mg.
- 18) Flucloxacillin 2 g and gentamicin 160 mg.
- 19) Cefuroxime 1.5 g.
- 20) Cefazolin 2 g.
- 21) Ceftriaxone 2 g.
- 22) Co-amoxiclav 1.2g.
- 23) Teicoplanin 400 mg.
- 24) Cefuroxime 1.5 g and gentamicin 240 mg.
- 25) Teicoplanin 600 mg.
- 26) Cefuroxime 1.5 g and gentamicin 3 mg/kg, then three times more eight-hourly.
- 27) Teicoplanin 10 mg/kg, gentamicin 160 mg, then teicoplanin 10 mg/kg one dose after 12 hours.
- 28) Cefuroxime 1.5 g then three doses of cefuroxime 750 mg eight-hourly.
- 29) Co-amoxiclav 1.2 g then two doses of co-amoxiclav 600 mg eight-hourly.

- 30) Co-amoxiclav 1.2 g then two doses of co-amoxiclav 1.2 g eight-hourly.
- 31) Teicoplanin 400 mg and gentamicin 3 mg/kg, then teicoplanin 400 mg 12 hours later.
- 32) Cefuroxime 1.5 g then two doses of cefuroxime 1.5 g eight-hourly.
- 33) Flucloxacillin 1 g, gentamicin 3 mg/kg, then one dose flucloxacillin 1 g after six hours.
- 34) Teicoplanin 600 mg, gentamicin 5 mg/kg.
- 35) Flucloxacillin 2 g, gentamicin 3 mg/kg.
- 36) Teicoplanin 400 mg, gentamicin 2 mg/kg.
- 37) Teicoplanin 800 mg, gentamicin 160 mg.
- 38) Teicoplanin 600 mg, gentamicin 3 mg/kg.
- 39) Flucloxacillin 1 g, gentamicin 2 mg/kg.
- 40) Teicoplanin 10 mg/kg, gentamicin 5 mg/kg.
- 41) Teicoplanin 800 mg, gentamicin 3 mg/kg.
- 42) Teicoplanin 10 mg/kg, gentamicin 3 to 5 mg/kg.
- 43) Teicoplanin 600 mg, gentamicin 160 mg.
- 44) Teicoplanin 10 mg/kg, gentamicin 240 mg.
- 45) Teicoplanin 400 mg, gentamicin 120 mg.
- 46) Teicoplanin 12 mg/kg, gentamicin 5 mg/kg.
- 47) Flucloxacillin 1 g, gentamicin 120 mg.
- 48) Teicoplanin 600 mg, gentamicin 240 mg.
- 49) Flucloxacillin 1 g, gentamicin 3 mg/kg.
- 50) Teicoplanin 800 mg, gentamicin 120 mg.
- 51) Cefuroxime 2 g, teicoplanin 800 mg.
- 52) Flucloxacillin 1 g, gentamicin 5 mg/kg, then one dose of flucloxacillin 1 g after six hours.
- 53) Flucloxacillin 2 g and gentamicin 160 mg, then two doses of flucloxacillin 1 g six-hourly.

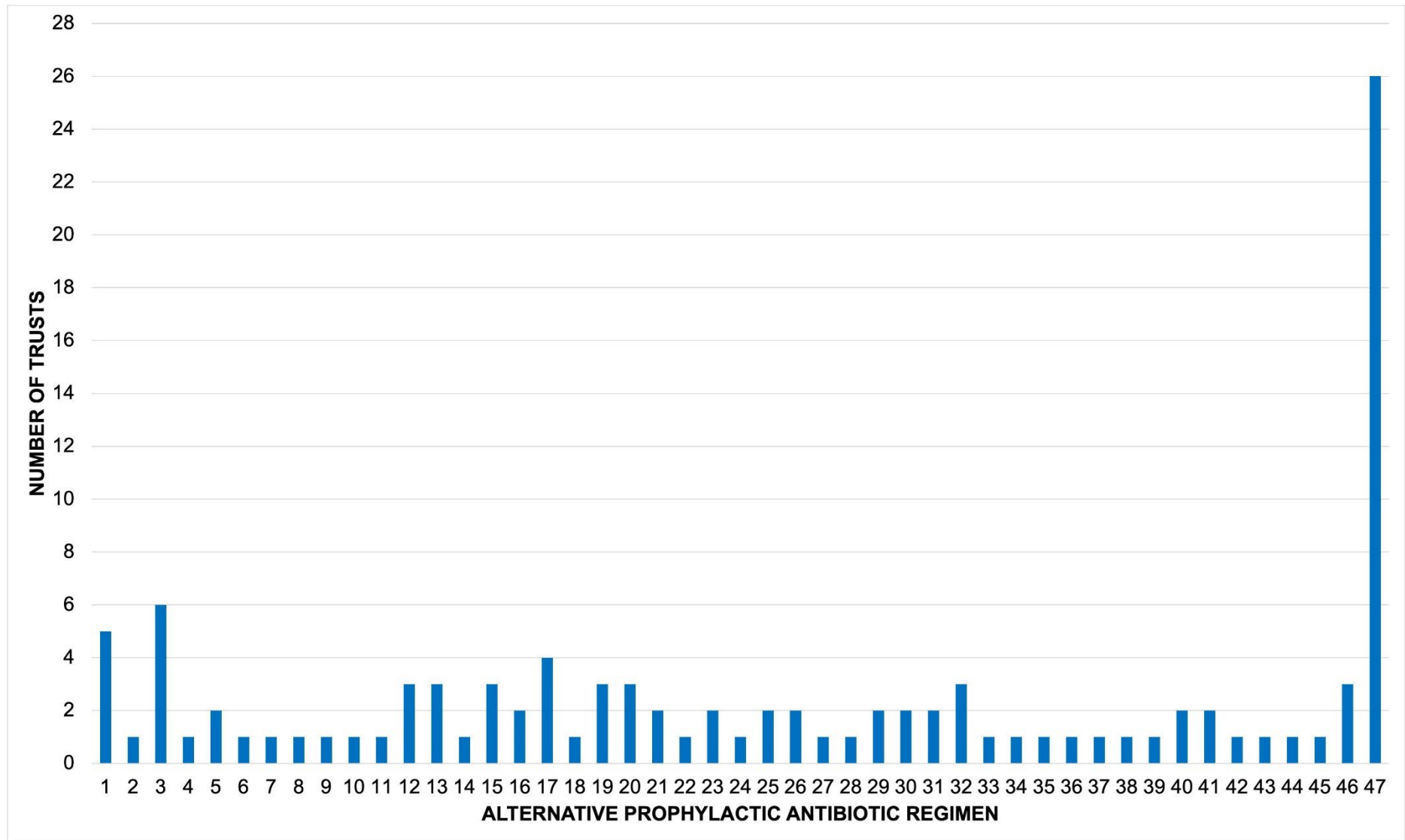


Fig b. Alternative antimicrobial prophylaxis regimen across centres. The regimens are described as follows:

- 1) Teicoplanin 800 mg and gentamicin 2 mg/kg.
- 2) Teicoplanin 600 mg and gentamicin 5 mg/kg.
- 3) Teicoplanin 600 mg and gentamicin 160 mg.
- 4) Vancomycin 1.5 g and gentamicin 3 mg/kg.
- 5) Teicoplanin 400 mg and gentamicin 160 mg.
- 6) Teicoplanin 600 mg and gentamicin 240 mg.
- 7) Cefuroxime 1.5 g, gentamicin 2 mg/kg, followed by two doses of cefuroxime 1.5 g eight-hourly.
- 8) Teicoplanin 800 mg and gentamicin 3 mg/kg, followed by teicoplanin 800 mg after 12 hours.
- 9) Teicoplanin 600 mg and gentamicin 2 mg/kg.
- 10) Teicoplanin 6 mg/kg and gentamicin 3 mg/kg followed by teicoplanin 6 mg/kg after 12 hours.
- 11) Teicoplanin 800 mg and gentamicin 1.5 mg/kg, followed by vancomycin 1 g.
- 12) Teicoplanin 400 mg and gentamicin 5 mg/kg, followed by teicoplanin 400 mg after 12 hours.
- 13) Teicoplanin 800 mg and gentamicin 160 mg.
- 14) Teicoplanin 6 mg/kg and gentamicin 120 mg/kg.
- 15) Clarithromycin 500 mg, followed by clarithromycin 500 mg after 12 hours.
- 16) Teicoplanin 400 mg, gentamicin 120 mg/kg, followed by teicoplanin 400 mg and gentamicin 120 mg/kg.
- 17) Teicoplanin 600 mg.
- 18) Clindamycin 1.2 g and gentamicin 240 mg, followed by two doses of clindamycin 600 mg six-hourly.
- 19) Vancomycin 1 g.
- 20) Teicoplanin 400 mg.
- 21) Teicoplanin 10 mg/kg and gentamicin 160 mg.
- 22) Teicoplanin 10 mg/kg and gentamicin 5 mg/kg.
- 23) Teicoplanin 800 mg, gentamicin 3 mg/kg.
- 24) Teicoplanin 400 mg and gentamicin 1.5 mg/kg.
- 25) Teicoplanin 400 mg and gentamicin 5 mg/kg.
- 26) Teicoplanin 800 mg and gentamicin 240 mg.
- 27) Teicoplanin 10 mg/kg and gentamicin 2 mg/kg.
- 28) Teicoplanin 10 mg/kg and gentamicin 3 mg/kg, followed by two doses of teicoplanin 10 mg/kg and gentamicin 3 mg/kg 24-hourly.
- 29) Teicoplanin 10 mg/kg and gentamicin 3 mg/kg.

- 30) Teicoplanin 400 mg and gentamicin 5 mg/kg, followed by teicoplanin 400 mg after 12 hours.
- 31) Teicoplanin 400 mg and gentamicin 120 mg/kg.
- 32) Teicoplanin 12 mg/kg and ciprofloxacin 400 mg, followed by ciprofloxacin 400 mg 12 hours later.
- 33) Teicoplanin 400 mg and gentamicin 240 mg and metronidazole 500 mg, followed by two doses of teicoplanin 400 mg every 12 hours.
- 34) Vancomycin 1.5 g and ciprofloxacin 400 mg, followed by one dose of ciprofloxacin 400 mg 12 hours later.
- 35) Teicoplanin 12 mg/kg and gentamicin 3 mg/kg.
- 36) Teicoplanin 800 mg and gentamicin 240 mg.
- 37) Teicoplanin 800 mg and gentamicin 5 mg/kg.
- 38) Teicoplanin 800 mg followed by teicoplanin 800 mg after 12 hours.
- 39) Teicoplanin 400 mg and gentamicin 3 mg/kg.
- 40) Teicoplanin 800 mg and gentamicin 120 mg/kg.
- 41) Teicoplanin 10 mg/kg.
- 42) Teicoplanin 100 mg and gentamicin 120 mg/kg.
- 43) Teicoplanin 600 mg and gentamicin 3 mg/kg.
- 44) Teicoplanin 800 mg.
- 45) Teicoplanin 800 mg and gentamicin 1.5 mg/kg.
- 46) Teicoplanin 400 mg and gentamicin 2 mg/kg.
- 47) No data available.

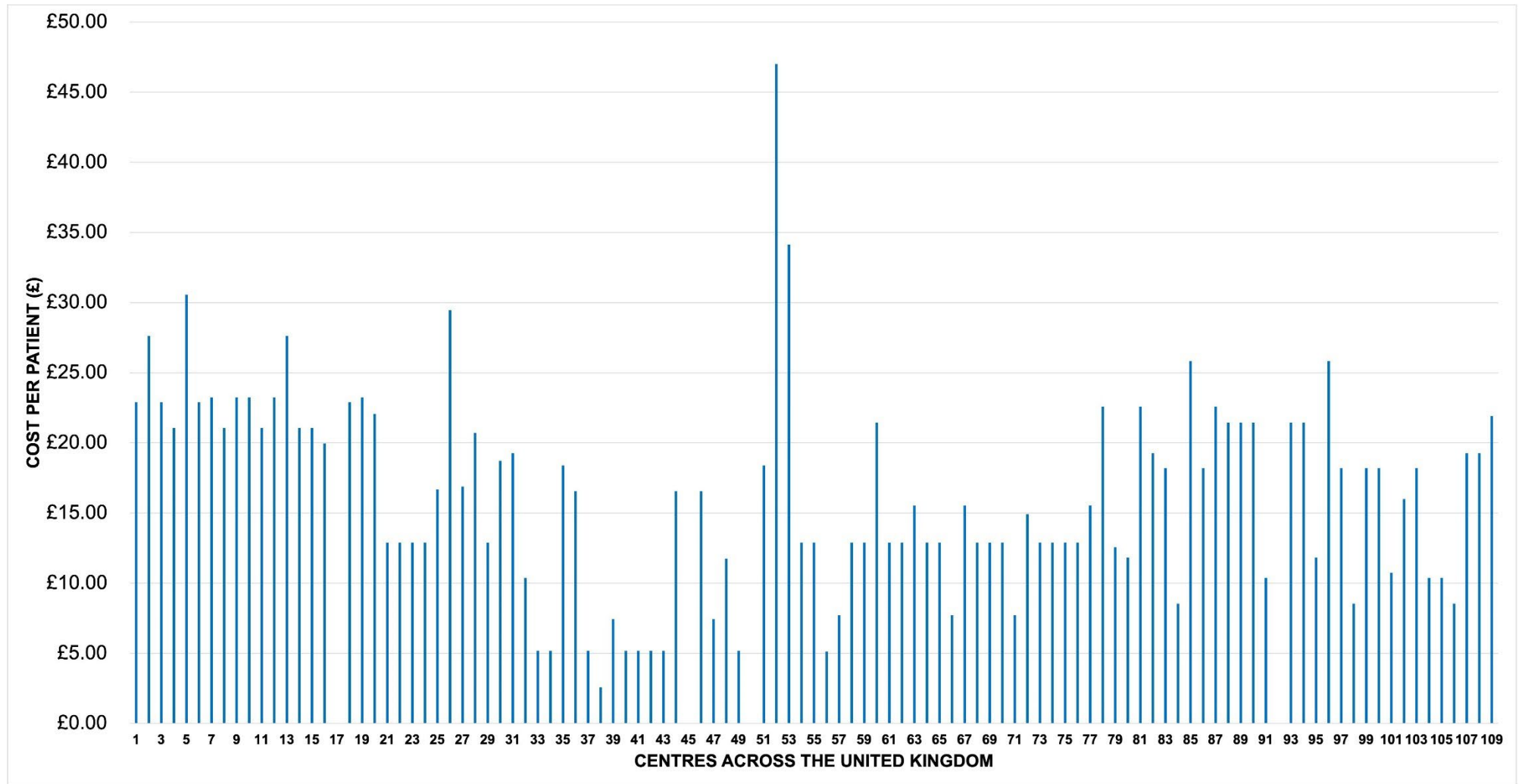


Fig c. Cost per patient (£). The centres are described as follows:

- 1) Nottingham University Hospital NHS Trust.
- 2) The Queen Elizabeth, King's Lynn NHS Trust.
- 3) Manchester University NHS Trust.
- 4) East Kent Hospitals NHS Trust.
- 5) Frimley Health NHS Trust.
- 6) Surrey and Sussex Healthcare NHS Trust.
- 7) Western Sussex Hospitals NHS Trust.
- 8) University Hospital Southampton NHS Trust.
- 9) Gloucestershire Hospitals NHS Trust.
- 10) Royal United Hospitals Bath NHS Trust.
- 11) Salisbury NHS Foundation Trust.
- 12) Taunton, Somerset, and Yeovil District NHS Foundation Trusts.
- 13) Weston Area Health NHS Trust.
- 14) The Dudley Group NHS Trust.
- 15) University Hospitals Birmingham NHS Trust.
- 16) Worcestershire Acute Hospitals NHS Trust.
- 17) Lincolnshire STP.
- 18) Barnsley NHS Foundation Trust.
- 19) Spire Health Group.
- 20) East And North Hertfordshire NHS Trust.
- 21) The Wellington Hospital.
- 22) University College London Hospital NHS Trust.
- 23) London Bridge Hospital.
- 24) The Lister Hospital.
- 25) University Hospital of Morecambe Bay NHS Trust.
- 26) Hampshire Hospital NHS Trust.
- 27) Portsmouth Hospitals NHS Trust.
- 28) Shrewsbury and Telford Hospital NHS Trust.
- 29) The Royal Wolverhampton NHS Trust.

- 30) Doncaster and Bassetlaw Hospitals NHS Trust.
- 31) West Suffolk NHS Foundation Trust.
- 32) Western Health and Social Care Trust.
- 33) Northampton General NHS Trust.
- 34) Norfolk and Norwich University NHS Trust.
- 35) Royal Free London NHS Trust and RNOH Trust.
- 36) Whittington Health NHS Trust.
- 37) Barts NHS Trust.
- 38) St George's University Hospital NHS Trust.
- 39) East Lancashire NHS Trust.
- 40) Southport and Ormskirk NHS Trust.
- 41) St Helens and Knowsley NHS Trust.
- 42) East Sussex Healthcare NHS Trust.
- 43) Epsom and St Helier University NHS Trust.
- 44) North Bristol NHS Trust.
- 45) University Hospital Dorset NHS Trust.
- 46) South Tees Hospitals NHS Trust.
- 47) Leeds Teaching Hospitals NHS Trust.
- 48) Betsi Cadwaladr University LHB.
- 49) South Eastern Health And Social Care Trust.
- 50) Highland NHS Trust.
- 51) Southern District Health Board.
- 52) Cromwell Hospital.
- 53) Chesterfield Royal Hospital NHS Trust.
- 54) University Hospital of Derby and Burton NHS Trust.
- 55) Kettering General Hospital NHS Trust.
- 56) University Hospital of Leicester NHS Trust.
- 57) Barking, Havering and Redbridge NHS Trust.
- 58) Barking, Havering and Redbridge NHS Trust.
- 59) Cambridgeshire NHS Trust.
- 60) James Paget University NHS Trust.

- 61) Mid And South Essex NHS Trust.
- 62) St John And St Elizabeth Hospital.
- 63) Imperial College Healthcare NHS Trust.
- 64) The Hillingdon Hospitals NHS Trust.
- 65) Princess Grace Hospital.
- 66) County Durham and Darlington NHS Trust.
- 67) The Newcastle Upon Tyne Hospitals NHS Trust.
- 68) Wrightington, Wigan and Leigh NHS Trust.
- 69) Dartford And Gravesham NHS Trust.
- 70) Medway NHS Trust.
- 71) University Hospitals Bristol and Weston NHS Trust.
- 72) University Hospital of North Midlands NHS Trust.
- 73) Airedale NHS Trust.
- 74) Cwm Taf Morgannwg University LHB.
- 75) Hywel Dda University LHB.
- 76) Swansea Bay University LHB.
- 77) Belfast Health and Social Care Trust.
- 78) Bedford Hospital NHS Trust.
- 79) East Suffolk and North Essex NHS Trust.
- 80) Luton & Dunstable University NHS Trust.
- 81) North West Anglia NHS Foundation Trust.
- 82) The Princess Alexandra Hospital NHS Trust.
- 83) West Hertfordshire Hospitals NHS Trust.
- 84) Wye Valley NHS Trust.
- 85) North Middlesex University Hospital.
- 86) Homerton University Hospital NHS Trust.
- 87) London North West University NHS Trust.
- 88) North Cumbria NHS Trust.
- 89) Northumbria Healthcare NHS Trust.
- 90) Ashford and St Peter's NHS Trust.
- 91) Brighton and Sussex NHS Trust.

- 92) Queen Victoria Hospital NHS Trust.
- 93) Royal Surrey County NHS Trust.
- 94) Buckinghamshire NHS Trust.
- 95) Milton Keynes University NHS Trust.
- 96) Royal Berkshire NHS Trust.
- 97) Great Western Hospital NHS Trust.
- 98) Royal Cornwall NHS Trust.
- 99) Royal Devon and Exeter NHS Trust.
- 100) University Hospital Plymouth NHS Trust.
- 101) George Eliot Hospital NHS Trust.
- 102) Sandwell and West Birmingham NHS Trust.
- 103) South Warwickshire NHS Trust.
- 104) Walsall Healthcare NHS Trust.
- 105) Northern Lincolnshire and Goole NHS Trust.
- 106) Harrogate and District NHS Trust.
- 107) Isle Of Wight NHS Trust.
- 108) Aneurin Bevan University LHB.
- 109) Cardiff and Vale University LHB.

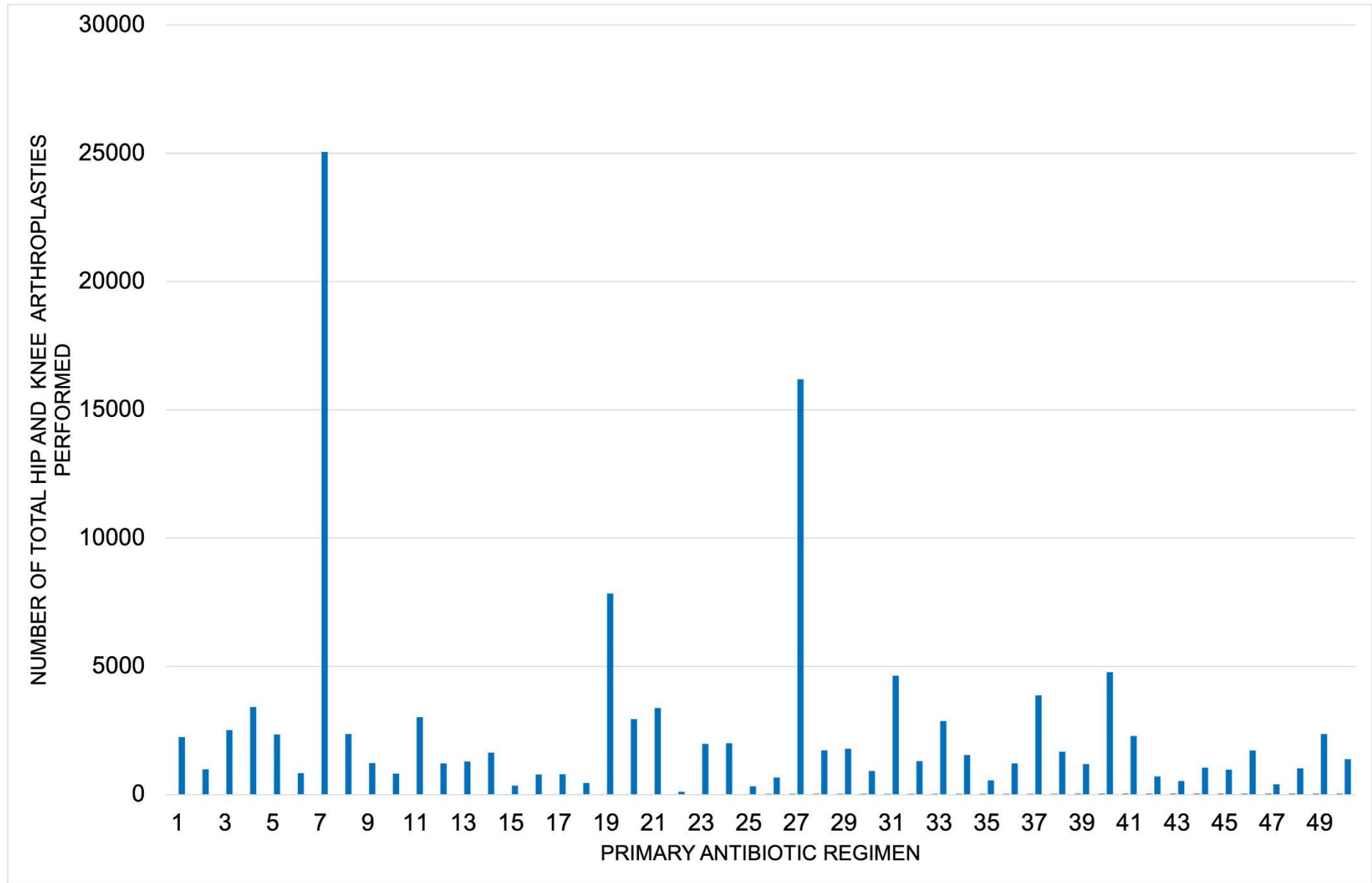


Fig d. Number of total hip and knee arthroplasties performed per primary antimicrobial regimen. The regimens are described as follows:

- 1) Flucloxacillin 2 g and gentamicin 2 mg/kg followed by flucloxacillin 1 g three times six-hourly.
- 2) Flucloxacillin 1 g and gentamicin 5 mg/kg, followed by flucloxacillin 1 g three times six-hourly.
- 3) Flucloxacillin 2 g and gentamicin 160 mg, followed by flucloxacillin 1 g three times six-hourly.
- 4) Flucloxacillin 1 g and gentamicin 2 mg/kg, followed by flucloxacillin 1 g three times six-hourly.
- 5) Flucloxacillin 2 g and gentamicin 3 mg/kg, followed by flucloxacillin 2 g three times six-hourly.
- 6) Flucloxacillin 1 g and gentamicin 240 mg, followed by flucloxacillin 1 g three times six-hourly.
- 7) Flucloxacillin 1 g and gentamicin 3 mg/kg, followed by flucloxacillin 1 g three times six-hourly.
- 8) Flucloxacillin 1 g and gentamicin 160 mg, followed by flucloxacillin 1 g three times six-hourly.
- 9) Flucloxacillin 1 g and gentamicin 1.5 mg/kg, followed by flucloxacillin 1 g three times six-hourly.
- 10) Cefuroxime 1.5 g and gentamicin 120 mg, followed by cefuroxime 1.5 g twice eight-hourly.
- 11) Cefuroxime 1.5 g followed by cefuroxime 750 mg three times eight-hourly.
- 12) Flucloxacillin 1 g followed by flucloxacillin 1 g three times six-hourly.
- 13) Flucloxacillin 1 g and flucloxacillin 2 g and gentamicin 160 mg and gentamicin 240 mg, followed by flucloxacillin 1 g twice six-hourly.
- 14) Flucloxacillin 1 g and gentamicin 160 mg, followed by flucloxacillin 1 g twice six-hourly.
- 15) Cefuroxime 1.5 g followed by cefuroxime 1.5 g three times eight-hourly.
- 16) Flucloxacillin 2 g and gentamicin 160 mg, followed by flucloxacillin 1 g twice six-hourly.
- 17) Teicoplanin 10 mg/kg and gentamicin 160 mg.
- 18) Flucloxacillin 2 g and gentamicin 160 mg.
- 19) Cefuroxime 1.5 g.
- 20) Cefalozin 2 g.
- 21) Ceftriaxone 2 g.
- 22) Co-amoxiclav 1.2 g.
- 23) Teicoplanin 400 mg.
- 24) Cefuroxime 1.5 g and gentamicin 240 mg.
- 25) Cefuroxime 1.5 g and gentamicin 3 mg/kg, followed by cefuroxime 1.5 g and gentamicin 3 mg/kg three times eight-hourly.
- 26) Teicoplanin 10 mg/kg and gentamicin 160 mg, followed by teicoplanin 10 mg/kg after 12 hours.
- 27) Cefuroxime 1.5 g followed by cefuroxime 750 mg twice eight-hourly.
- 28) Co-amoxiclav 1.2 g followed by co-amoxiclav 600 mg twice eight-hourly.
- 29) Co-amoxiclav 1.2 g followed by co-amoxiclav 1.2 g twice eight-hourly.

- 30) Teicoplanin 400 mg and gentamicin 3 mg/kg, followed by teicoplanin 400 mg after 12 hours.
- 31) Cefuroxime 1.5 g followed by cefuroxime 1.5 g twice eight-hourly.
- 32) Flucloxacillin 1 g and gentamicin 3 mg/kg, followed by flucloxacillin 1 g after six hours.
- 33) Teicoplanin 600 mg and gentamicin 5 mg/kg.
- 34) Flucloxacillin 2 g and gentamicin 3 mg/kg.
- 35) Teicoplanin 400 mg and gentamicin 2 mg/kg.
- 36) Teicoplanin 800 mg and gentamicin 160 mg.
- 37) Teicoplanin 600 mg and gentamicin 3 mg/kg.
- 38) Flucloxacillin 1 g and gentamicin 2 mg/kg.
- 39) Teicoplanin 10 mg/kg and gentamicin 5 mg/kg.
- 40) Teicoplanin 800 mg and gentamicin 3 mg/kg.
- 41) Flucloxacillin 2 g and gentamicin 160 mg.
- 42) Teicoplanin 10 mg/kg and gentamicin 240 mg.
- 43) Teicoplanin 400 mg and gentamicin 120 mg.
- 44) Teicoplanin 12 mg/kg and gentamicin 5 mg/kg.
- 45) Flucloxacillin 1 g and gentamicin 120 mg.
- 46) Teicoplanin 600 mg and gentamicin 240 mg.
- 47) Flucloxacillin 1 g and gentamicin 3 mg/kg.
- 48) Teicoplanin 600 mg and gentamicin 160 mg.
- 49) Teicoplanin 800 mg and gentamicin 120 mg.
- 50) Cefuroxime 2 g and teicoplanin 800 mg.