

This graphic summarises guidance on choice of antibiotic for the treatment of Lyme disease, produced by the UK's National Institute for Health and Care Excellence (NICE). They recommend offering one initial course of antibiotics, and considering a second course of an alternative antibiotic for people with ongoing symptoms. If a person's symptoms continue following two completed courses of antibiotics, their advice is to consider discussion with a national reference laboratory or referral to a specialist appropriate for the person's symptoms

KEY

First, second or third choice

1st Doxycycline

Oral or intravenous administration

Duration of regimen

21 days

Oral



Erythema migrans and/or non-focal symptoms

1st Doxycycline

21 days Oral

2nd Amoxicillin

21 days Oral

3rd Azithromycin

17 days Oral

Lyme disease affecting the cranial nerves or peripheral nervous system

1st Doxycycline

21 days Oral

2nd Amoxicillin

21 days Oral

Lyme disease affecting the central nervous system

1st Ceftriaxone

Enhanced dose 21 days IV

2nd Doxycycline

Enhanced dose 21 days Oral

Lyme carditis

1st Doxycycline

21 days Oral

2nd Ceftriaxone

First choice for haemodynamically unstable patients 21 days IV

Lyme disease arthritis or acrodermatitis chronica atrophicans

1st Doxycycline

28 days Oral

2nd Amoxicillin

28 days Oral

3rd Ceftriaxone

28 days IV

Dosing recommendations

Doxycycline

Age 12+ Children 45kg +

100mg 2x per day or 200mg daily

Enhanced dose 200mg 2x per day or 400mg daily

Children 9–12 years under 45kg

Day 1: 5mg per kg 2 divided doses

Subsequent days: 2.5mg per kg or up to 5mg/kg in severe cases



Doxycycline and azithromycin have no marketing authorisation in the UK for children under 12. However, use in children aged 9 years and above is accepted specialist practice. Informed consent should be obtained, and full responsibility taken by the prescriber

Azithromycin

Age 12+ Children 50kg +

500mg daily

Children under 50kg

10mg per kg daily



Do not use azithromycin to treat people with cardiac abnormalities because of its effect on QT interval

Ceftriaxone

Age 12+ Children 50kg +

2g daily

Enhanced dose 2g 2x per day or 4g daily

Children under 50kg

80mg per kg daily

Amoxicillin

Age 12+ Children 33kg +

1g 3x per day

Children under 33kg

30mg per kg 3x per day

Discuss management of Lyme disease in children and young people with a specialist, unless they have isolated erythema migrans with no other symptoms

For Lyme disease suspected during pregnancy, use appropriate antibiotics for stage of pregnancy

