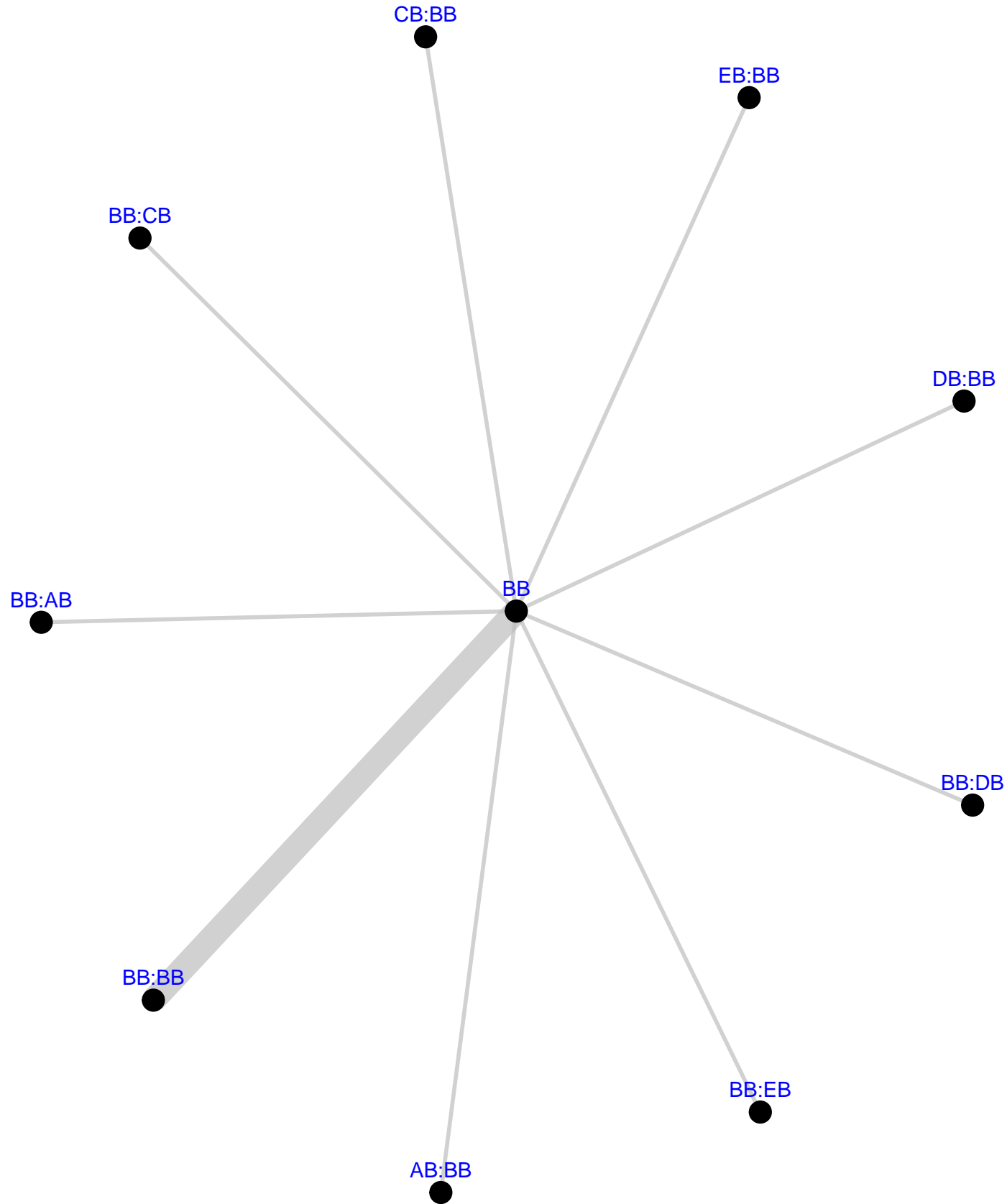Posterior mean rate of branching event with parent state BB

Posterior mean count of branching event with parent state BB