Study Objective
To map the prevalence of *Plasmodium falciparum* dehydrofolate reductase (*Pfdhfr*) between 2010 – 2018 in Tanzania and Kenya

Search strings

(("malaria"[MeSH Terms] OR "malaria"[All Fields]) AND dhfr[All Fields]) AND ("kenya"[MeSH Terms] OR "kenya"[All Fields]) AND ("2008/11/10"[PDat] : "2018/11/07"[PDat])

(("malaria"[MeSH Terms] OR "malaria"[All Fields]) AND dhfr[All Fields]) AND ("tanzania"[MeSH Terms] OR "tanzania"[All Fields]) AND ("2008/11/10"[PDat] : "2018/11/07"[PDat])
### Articles identified through PubMed searching (n= 27)

- Articles excluded (n= 14)
  - Not within study sites
  - Over past 10 years

- Articles screened (n=13)

- Full text articles screened (n=9)
  - Articles excluded (n=4)
    - n=2, No prevalence data
    - n=2, Analysis haplotype data

- Articles included in mapping (n=9)

**Fig1:** Flow diagram summarizing the process of literature search and selection
Prevalence of triple mutant pfdfhr

Tanzania

Study sites

Prevalence of triple mutant pfdfhr

- Igombe
- Muheza
- Muleba
- Nachinevea
- Coastal
- Tanga
- Mwara
- Mbeja
- Mwanza
- Kagera

2012: Blue
2014: Red
2015: Green
Map of PfDHFR in Tanzania and Kenya between 2010-2018
Discussion/Conclusion

- Prevalence of *Pfdhfr* triple mutant parasites is high both Kenya and Tanzania
- The resistance seems to be at fixation in both countries
- Occurrence of triple mutant and double mutant quintuple mutation in was shown to compromise IPTp SP
- Alternative strategies are needed to control malaria during pregnancy
Thank You