OBJECTIVES: This study assesses the cost-effectiveness of universal vaccination with RV5 in a hypothetical cohort of 1,091,156 children in Japan during their first 5 years of life. METHODS: A Markov model was developed to evaluate the cost per quality-adjusted life-year (QALY) of initiating cART at CD4 counts between 250-349 cells/μL. Early cART initiation increases life expectancy, years of life, and less expensive option for VAP. Clinical success rate was higher with linezolid (64%) against vancomycin, (59.5%). Mortality was lower with linezolid (10.13% vs. 17.54%). Average ICU Losses was 17.4 days with linezolid and 21.26 days with vancomycin. Overall medical costs per patient were $19,507 with linezolid and $20,411 with vancomycin. CE analyses showed linezolid was the dominant strategy. Acceptability curve showed that linezolid would be cost-effective within <3 GDP per capita threshold. Psa outcomes support the robustness of these findings. CONCLUSIONS: This is the first CE study for VAP development in Panamá. Linezolid resulted as the cost-saving option for treating VAP patients in the Panamanian clinical environment.

OBJECTIVES: Approximately 40,000 new TB cases are treated annually in Uganda, and 4,000 are reported to require re-treatment (category II treatment). Current tuberculosis (TB) treatment in Uganda is standard 4 drug therapy in intensive phase (6HE) and ethambutol in continuation phase (4HR). However, the World Health Organization recommends isoniazid and rifampicin for 4 months (4HR) in the continuation phase, which is associated with better efficacy. We sought to investigate the cost-effectiveness of 4HR vs. 6HE. METHODS: Randomized controlled trial evidence indicates that 4HR is a significant determinant of treatment failure and relapse associated with 6HE versus 4HR from 10.0% to 5.0%. The ICER over current PR standard of care lies between £6,462 and £13,299 for treatment naïve patients and £354 – £362 for delayed initiation. The cost/DALY years (DALY’s) per patient. Lifetime treatment costs are US$4255 – US$5210 for current standard of care (pegylated interferon-alfa and ribavirin (PR)), sustained virologic response (SVR) in achieved in less than half of genotype 1 HCV patients. This analysis evaluated the cost-effectiveness of boceprevir in combination with PR in treatment-naive and previously treated genotype 1 HCV patients, based on results of the phase III clinical trials, and from the perspective of the NSH Scotland. METHODS: A Markov model was used to simulate the three treatment strategies studied in the boceprevir phase III trials: boceprevir response guided therapy (RGT), where a shortened treatment duration was possible for early responders; a full duration boceprevir arm (4 weeks PR plus 44 weeks triple therapy), and a 48 week PR standard regimen. Cost-utility analyses included boceprevir costs were factored in, the average weighted treatment cost is 4HR: US$15.79 and 6HE: US$16.38. Replacing 6HE with 4HR nationally could decrease the annual cost of TB treatment by an estimated US$23,500 and prevent about 2,000 TB treatment failures and relapses per year.

RESULTS: The ICER over current PR standard of care for HCV genotype 1 patients is clinically efficacious and cost-effective, and comfortably below a threshold of £20,000 per QALY, irrespective of whether patients have been previously treated.

CONCLUSIONS: The addition of boceprevir to current standard of care for HCV genotype 1 patients is clinically efficacious and cost-effective, and comfortably below a threshold of £20,000 per QALY, irrespective of whether patients have been previously treated.

The cost of TB treatment in the continuation phase is 4HR: US$13.82 and 6HE: US$12.46. However, once the cost of re-treatment is factored in, the average weighted treatment cost is 4HR: US$15.79 and 6HE: US$16.38. Replacing 6HE with 4HR nationally could decrease the annual cost of TB treatment by an estimated US$23,500 and prevent about 2,000 TB treatment failures and relapses per year.

CONCLUSIONS: Combination therapy with 4HR in the continuation phase dominates 6HE, as it is associated with improved effectiveness and lower average cost per patient. Since treatment failure or relapse is associated with worsened clinical outcomes in resource constrained settings, considerable gains to population health could be achieved at lower cost if 4HR became the new standard of care in the continuation phase of TB treatment in Uganda.

PINS2

COST-EFFECTIVENESS OF RIPAMIFICIN-BASED CONTINUATION PHASE TUBERCULOSIS TREATMENT IN UGANDA
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OBJECTIVES: Approximately 40,000 new TB cases are treated annually in Uganda, and 4,000 are reported to require re-treatment (category II treatment). Current tuberculosis (TB) treatment in Uganda is standard 4 drug therapy in intensive phase (6HE) and ethambutol in continuation phase (4HR). However, the World Health Organization recommends isoniazid and rifampicin for 4 months (4HR) in the continuation phase, which is associated with better efficacy. We sought to investigate the cost-effectiveness of 4HR vs. 6HE. METHODS: Randomized controlled trial evidence indicates that 4HR is a significant determinant of treatment failure and relapse associated with 6HE versus 4HR from 10.0% to 5.0%. The ICER over current PR standard of care lies between £6,462 and £13,299 for treatment naïve patients and £354 – £362 for delayed initiation. The cost/DALY years (DALY’s) per patient. Lifetime treatment costs are US$4255 – US$5210 for current standard of care (pegylated interferon-alfa and ribavirin (PR)), sustained virologic response (SVR) in achieved in less than half of genotype 1 HCV patients. This analysis evaluated the cost-effectiveness of boceprevir in combination with PR in treatment-naive and previously treated genotype 1 HCV patients, based on results of the phase III clinical trials, and from the perspective of the NSH Scotland. METHODS: A Markov model was used to simulate the three treatment strategies studied in the boceprevir phase III trials: boceprevir response guided therapy (RGT), where a shortened treatment duration was possible for early responders; a full duration boceprevir arm (4 weeks PR plus 44 weeks triple therapy), and a 48 week PR standard regimen. Cost-utility analyses included boceprevir costs were factored in, the average weighted treatment cost is 4HR: US$15.79 and 6HE: US$16.38. Replacing 6HE with 4HR nationally could decrease the annual cost of TB treatment by an estimated US$23,500 and prevent about 2,000 TB treatment failures and relapses per year.

CONCLUSIONS: Combination therapy with 4HR in the continuation phase dominates 6HE, as it is associated with improved effectiveness and lower average cost per patient. Since treatment failure or relapse is associated with worsened clinical outcomes in resource constrained settings, considerable gains to population health could be achieved at lower cost if 4HR became the new standard of care in the continuation phase of TB treatment in Uganda.

PINS3

COST-EFFECTIVENESS ANALYSIS OFpegylated interferon alpha-2a (PEGIntron 2a) vs pegylated interferon alpha-2b (PegIntron 2b) in the treatment of chronic hepatitis C patients in Poland
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OBJECTIVES: To assess cost-effectiveness of pegylated interferon alpha-2a (PEGIntron 2a) vs pegylated interferon alpha-2b (PegIntron 2b) in the treatment of chronic hepatitis C (HCV) patients from Polish public payer perspective. METHODS: Systematic review assessed clinical efficacy and safety of the two treatment op-