OBJECTIVE

To develop a decision analytic model to assess costs and effectiveness of SS+VP and SS+cerclage versus no screening (NS) in preventing PTB among high-risk US women (those with a history of PTB) carrying a singleton gestation.

RESULTS

Similar effectiveness was observed between SS+VP, SS+cerclage, and NS at both PTB thresholds.

From a cost-minimization standpoint, SS+VP is the most cost-saving strategy, costing $47,882.

SS+cerclage was the most effective method, preventing 8,081 more PTBs than NS for additional $43M (0.26% of total costs) in our hypothetical population analysis (Table 1).

RESULTS (continued)

Figure 3: Incremental CE Plane, SS+VP vs. NS, ≥37 Wks.

Figure 4: Incremental CE Plane, SS+cerclage vs. NS, ≥37 Wks.

LIMITATIONS

Model limited to high-risk women with singleton gestations.

Pessary is not included as a treatment option for SC.

CONCLUSION

For women with SC, SS+VP is less costly and SS+cerclage is more effective compared to NS in preventing recurrent PTB.

Model is critical to informing US policy because it quantifies costs and PTB reduction of modern practice in high-risk women with SC.

Future work includes incorporating pessary with updated efficacy data as well as adjacent 17-OHP use with cerclage.

REFERENCES


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This study was unfunded.