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**REFRAMING BEHAVIORAL ACCEPTABILITY OF MICROBICIDE GEL VEHICLES IN
CONJUNCTION WITH BIOPHYSICAL CONSTRAINTS**

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First generation microbicide candidates such as Pro2000 are delivered via gel vehicles, intended to spread and coat onto the vaginal epithelium after application. The speed of the coating process – or the waiting time before protected sexual intercourse for the user – depends on intrinsic biophysical properties of the gel texture. Notwithstanding user preferences, biophysical constraints restrict the potential choices for an effective product. In other words, the microbicide gel vehicle first must be physically synthesizable, then acceptable to the user, and finally applied in a manner that promotes adequate coating: the user must make an informed choice in a realistic range of available products for this last step to work. The acceptability study we present here is novel, as we explore gel vehicle preferences with and without the biophysical constraints that will be necessary for effectiveness. The relevant tradeoff concerns waiting time before sexual intercourse, as it varies with the viscosity (or thickness) of the gel vehicle. The exploration reveals, on the one hand, to users what are the tradeoffs inherent in physically realistic possibilities; on the other hand, to market developers of which physical features they should retain in the design. This framework will improve instruction applications given to participants of large clinical trials and improve therefore adherence.