

# Microbicides 2002 Meeting Antwerp, Belgium

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Safety and Tolerance  
Studies of Potential  
Microbicides Following  
Multiple Penile  
Applications

CONRAD

 GMP

# Clinical Development Plan

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- ◆ Safety Studies:
  - ▶ Female
    - Initial Trial
    - Expanded Safety Trials
  - ▶ Male
    - Initial Trial <
    - HIV-positive population
- ◆ Effectiveness Studies:
  - ▶ HIV prevention
  - ▶ Contraception

# Products in Clinical Trials

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## Sulfated/sulfonated polymers

- ▶ Cellulose sulfate
- ▶ Polystyrene sulfonate
- ▶ Pro2000

## pH buffering agents

- ▶ BufferGel
- ▶ ACIDFORM

## Surfactants

- ▶ C31G

# Male Tolerance Studies – Basic Design

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- ◆ Randomized, blinded, comparative
- ◆ Population
  - ▶ Normal, healthy males
  - ▶ Circumcised & uncircumcised men in 1:1 ratio
- ◆ Product exposure
  - ▶ 2:1 ratio of test product to control
  - ▶ Daily application for 7 consecutive days
  - ▶ 2-3 ml of product left on for 6-10 hours

# Male Tolerance Studies – Basic Design

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- ◆ Objectives
  - ▶ Safety
  - ▶ Acceptability
- ◆ Study visits
  - ▶ Screening
  - ▶ Enrollment
  - ▶ Final visit
  - ▶ Unscheduled (as needed)

# CS Male Tolerance Study

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Treatment group	Number of circumcised men	Number of uncircumcised men	Total
CS - 2.5 ml	12	12	24
Conceptrol® - 2.5 ml	6	6	12
Total	18	18	36

# CS Male Tolerance Study - Results

Treatment group	Symptom/sign	After which use	Duration	Circumcision status
CS (n= 24)	Tingling/stinging	1 <sup>st</sup>	1 min	No
	Stinging	3 <sup>rd</sup>	1 min	
Conceptrol (n= 12)	Dry skin	1 <sup>st</sup>	7 days	Yes
	Rash	2 <sup>nd</sup>	2 days	No
	Redness	4 <sup>th</sup>	12 hrs	
	Pustules	7 <sup>th</sup>	unknown	
	Tingling	1 <sup>st</sup>	1 min	No

# PRO 2000 – Male Tolerance Study Results

Adverse event	PRO 2000		Placebo	
	# (% of men)	# of reports	# (% of men)	# of reports
	N = 24		N = 12	
Chapping, dryness	4 (16.7%)	12	1 (8.3%)	1
Itching	2 (8.3%)	3	0 (0.0%)	0
Tingling	2 (8.3%)	8	0 (0.0%)	0
Irritation, burning	1 (4.2%)	1	1 (8.3%)	1
Laceration/abrasion and complications thereof	1 (4.2%)	3	1 (8.3%)	1
Total	8 (33.3%)	27	3 (25%)	3
Total excluding chapping/dryness	4 (16.7%)	15	2 (16.7%)	2

# BufferGel - Male Tolerance Study Results

Adverse event	BufferGel		K-Y® Jelly	
	# (% of men)	# of reports	# (% of men)	# of reports
	N = 24		N = 12	
Itching	1 (4.25%)	1	2 (16.7%)	2
Rash	1 (4.2%)	1	0 (0.0%)	0
Erythema	1 (4.2%)	1	0 (0.0%)	0
Tingling	1 (4.2%)	1	0 (0.0%)	0
Burning/stinging	1 (4.2%)	1	0 (0.0%)	0
Discoloration	1 (4.2%)	1	0 (0.0%)	0
Total	3 (12.5%)	6	2 (16.7%)	2

# Acceptability Results

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- ◆ CS: 95% would not object to their partner using CS vs 83% for Conceptrol®; 70% would not detect use by partner
- ◆ PRO 2000: 88% would not object to partner's use of products (placebo control); 66% would not detect use
- ◆ BufferGel: 90% would not object to partner's use of products (K-Y® control product); 60% would not detect use by partner

# C31G - Male Tolerance Study

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- ◆ Test group: 1.0% C31G
- ◆ Control group: Extra-Strength Gynol II (3% N-9)
- ◆ 32 of 36 enrolled
- ◆ 21 completed
- ◆ Some reports of gel drying the skin and increasing penile sensitivity
- ◆ One report of delayed irritation possibly related to product use

# CONCLUSIONS

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- ◆ Very few differences in group characteristics other than circumcision status and race
  - ▶ More non-Caucasian men in uncircumcised groups
- ◆ All products were well tolerated as tested: similar types of AEs reported for all products
- ◆ Trapping of gel under the foreskin may prolong contact with the product but no differences were noted in reported AEs based on circumcision status
- ◆ No elevated levels of LE were reported