

**RESULTS OF VAGINAL CYTOLOGY STUDY USING TRANSITION MATRIX APPROACH**  
**Summary of Female Rats, Study R92025B 4-Methylimidazole F0**

STAGE	COMPARISON	P_VALUE	TREND
Overall Tests	Overall	0.013	
Overall Tests	Low vs. Controls	0.044	N
Overall Tests	Mid vs. Controls	0.555	N
Overall Tests	High vs. Controls	0.013	N
Extended Estrus	Overall	0.001	
Extended Estrus	Low vs. Controls	0.004	
Extended Estrus	Mid vs. Controls	0.8	
Extended Estrus	High vs. Controls	0.002	N
Extended Diestrus	Overall	0.04	
Extended Diestrus	Low vs. Controls	0.407	N
Extended Diestrus	Mid vs. Controls	0.206	
Extended Diestrus	High vs. Controls	0.016	
Extended Metestrus	Overall	1	
Extended Metestrus	Low vs. Controls	1	
Extended Metestrus	Mid vs. Controls	1	
Extended Metestrus	High vs. Controls	1	
Extended Proestrus	Overall	1	
Extended Proestrus	Low vs. Controls	1	
Extended Proestrus	Mid vs. Controls	1	
Extended Proestrus	High vs. Controls	1	
Skipped Estrus	Overall	0.321	
Skipped Estrus	Low vs. Controls	0.437	N
Skipped Estrus	Mid vs. Controls	0.181	N
Skipped Estrus	High vs. Controls	0.292	N
Skipped Diestrus	Overall	0.169	
Skipped Diestrus	Low vs. Controls	0.143	N
Skipped Diestrus	Mid vs. Controls	0.181	N
Skipped Diestrus	High vs. Controls	0.292	N

*Note: N under trend indicates that the dosed group had fewer departures from normal than did the control group. Having no N under trend column indicates that the dosed group had more departures from normal than did the control group.*

**RESULTS OF VAGINAL CYTOLOGY STUDY USING TRANSITION MATRIX APPROACH**  
**Summary of Female Rats, Study R92025B 4-Methylimidazole F0**  
**Summary of Significant Groups**

<b>STAGE</b>	<b>COMPARISON</b>	<b>P_VALUE</b>	<b>TREND</b>
Overall Tests	Low vs. Controls	0.044	N
Overall Tests	High vs. Controls	0.013	N
Extended Estrus	Low vs. Controls	0.004	
Extended Estrus	High vs. Controls	0.002	N
Extended Diestrus	High vs. Controls	0.016	

*Note: N under trend indicates that the dosed group had fewer departures from normal than did the control group.  
 Having no N under trend column indicates that the dosed group had more departures from normal than did the control group.*

**RESULTS OF VAGINAL CYTOLOGY STUDY USING TRANSITION MATRIX APPROACH**  
**Summary of Female Rats, Study R92025B 4-Methylimidazole F1c Parental**

STAGE	COMPARISON	P_VALUE	TREND
Overall Tests	Overall	<0.001	
Overall Tests	Low vs. Controls	0.002	
Overall Tests	Mid vs. Controls	<0.001	N
Extended Estrus	Overall	0.011	
Extended Estrus	Low vs. Controls	0.335	N
Extended Estrus	Mid vs. Controls	0.005	N
Extended Diestrus	Overall	<0.001	
Extended Diestrus	Low vs. Controls	<0.001	
Extended Diestrus	Mid vs. Controls	<0.001	
Extended Metestrus	Overall	1	
Extended Metestrus	Low vs. Controls	1	
Extended Metestrus	Mid vs. Controls	1	
Extended Proestrus	Overall	1	
Extended Proestrus	Low vs. Controls	1	
Extended Proestrus	Mid vs. Controls	1	
Skipped Estrus	Overall	0.37	
Skipped Estrus	Low vs. Controls	0.885	N
Skipped Estrus	Mid vs. Controls	0.161	N
Skipped Diestrus	Overall	1	
Skipped Diestrus	Low vs. Controls	1	
Skipped Diestrus	Mid vs. Controls	1	

*Note: N under trend indicates that the dosed group had fewer departures from normal than did the control group.  
Having no N under trend column indicates that the dosed group had more departures from normal than did the control group.*

**RESULTS OF VAGINAL CYTOLOGY STUDY USING TRANSITION MATRIX APPROACH**  
**Summary of Female Rats, Study R92025B 4-Methylimidazole F1c Parental**  
**Summary of Significant Groups**

<b>STAGE</b>	<b>COMPARISON</b>	<b>P_VALUE</b>	<b>TREND</b>
Overall Tests	Low vs. Controls	0.002	
Overall Tests	Mid vs. Controls	<0.001	N
Extended Estrus	Mid vs. Controls	0.005	N
Extended Diestrus	Low vs. Controls	<0.001	
Extended Diestrus	Mid vs. Controls	<0.001	

*Note: N under trend indicates that the dosed group had fewer departures from normal than did the control group.  
 Having no N under trend column indicates that the dosed group had more departures from normal than did the control group.*