

	<b>Batch</b>	<b>Cancer</b>	<b>Outcome</b>
1	Batch 1	Cancer	mTCC ( 11 )
2	Batch 2	Normal, Cancer	mTCC ( 1 ), Normal ( 4 ), sTCC–CIS ( 13 )
3	Batch 3	Normal	Normal ( 4 )
4	Batch 4	Biopsy	Biopsy ( 5 )
5	Batch 5	Cancer, Biopsy	Biopsy ( 4 ), sTCC–CIS ( 3 ), sTCC+CIS ( 12 )

Explanation:

The problem here is that biological variables (cancer/normal/biopsy) are unevenly distributed across batches.

This confounding can lead to difficulty distinguishing true biological signals from batch effects.