

**Table S1.** The comparison of the fusion models with the no fusion model with the highest median accuracy for the Microarray\_163 genomic feature set. The sign represents the difference between median bootstrap accuracy of data fusion model and median bootstrap accuracy of best no fusion model.

**Feature set: Microarray\_163,**  
**Null hypothesis: medians are equal**

Feature selection	ReliefF		ReliefF		Wilcoxon		Wilcoxon	
	Early fusion		Late fusion		Early fusion		Late fusion	
nFeatures	sign	p-value	sign	p-value	sign	p-value	sign	p-value
<b>1</b>	-	<b>&lt;0.001</b>	NA	NA	-	<b>&lt;0.001</b>	NA	NA
<b>2</b>	+	<b>0.015</b>	+	<b>0.015</b>	-	<b>&lt;0.001</b>	-	0.642
<b>3</b>	+	<b>&lt;0.001</b>	+	<b>&lt;0.001</b>	-	<b>&lt;0.001</b>	-	0.489
<b>4</b>	+	<b>&lt;0.001</b>	+	<b>0.001</b>	-	0.196	+	0.064
<b>5</b>	+	<b>0.002</b>	+	<b>0.016</b>	-	0.946	+	<b>0.005</b>
<b>6</b>	-	0.115	-	0.357	+	0.129	+	<b>0.001</b>
<b>7</b>	+	<b>0.007</b>	+	<b>0.001</b>	+	0.091	+	<b>0.005</b>
<b>8</b>	+	<b>0.016</b>	+	<b>0.004</b>	+	<b>0.003</b>	+	<b>&lt;0.001</b>
<b>9</b>	+	<b>0.004</b>	+	<b>0.019</b>	+	0.09	+	<b>0.026</b>
<b>10</b>	-	0.147	+	0.053	+	0.326	+	0.234
<b>11</b>	+	0.157	+	0.198	-	0.977	-	0.972
<b>12</b>	-	0.672	-	0.655	+	0.869	+	0.858
<b>13</b>	-	0.425	-	0.569	-	0.981	-	0.972
<b>14</b>	-	0.179	-	0.101	-	0.946	-	0.901
<b>15</b>	-	0.056	-	<b>0.027</b>	-	0.693	-	0.722

**Table S2.** Comparison of the fusion models with the no fusion model with the highest median accuracy for the Microarray\_40 genomic feature set. The sign represents the difference between median bootstrap accuracy of data fusion model and median bootstrap accuracy of best no fusion model.

**Feature set: Microarray\_40,**  
**Null hypothesis: medians are equal**

Feature selection	ReliefF		ReliefF		Wilcoxon		Wilcoxon	
	Early fusion		Late fusion		Early fusion		Late fusion	
nFeatures	sign	p-value	sign	p-value	sign	p-value	sign	p-value
<b>1</b>	+	<b>0.043</b>	NA	NA	-	<b>&lt;0.001</b>	NA	NA
<b>2</b>	+	<b>&lt;0.001</b>	+	<b>&lt;0.001</b>	-	<b>&lt;0.001</b>	-	<b>0.048</b>
<b>3</b>	+	<b>&lt;0.001</b>	+	<b>&lt;0.001</b>	-	<b>&lt;0.001</b>	-	<b>&lt;0.001</b>
<b>4</b>	+	<b>&lt;0.001</b>	+	<b>&lt;0.001</b>	-	<b>&lt;0.001</b>	-	<b>0.002</b>

<b>5</b>	+	<b>0.002</b>	+	<b>0.003</b>	-	<b>0.005</b>	-	<b>0.018</b>
<b>6</b>	+	0.055	+	0.099	-	0.155	-	0.419
<b>7</b>	+	<b>0.041</b>	+	0.117	-	0.092	-	0.134
<b>8</b>	+	0.072	+	<b>0.047</b>	-	0.216	-	0.295
<b>9</b>	+	0.136	-	0.495	-	0.135	-	0.145
<b>10</b>	-	0.856	-	0.72	-	0.208	-	0.245
<b>11</b>	-	0.368	-	0.147	-	0.065	-	0.08
<b>12</b>	-	0.439	-	0.195	-	<b>0.002</b>	-	<b>0.003</b>
<b>13</b>	-	0.608	-	0.19	-	<b>&lt;0.001</b>	-	<b>&lt;0.001</b>
<b>14</b>	-	0.495	-	0.482	-	<b>&lt;0.001</b>	-	<b>&lt;0.001</b>
<b>15</b>	-	<b>0.039</b>	-	<b>0.038</b>	-	<b>&lt;0.001</b>	-	<b>&lt;0.001</b>