Cancer and normal attractors

Table 1: Gene expression value in each state

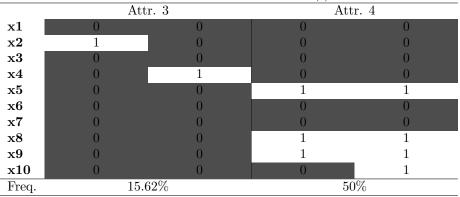
Gene	Cancer	Normal	Threshol		State2	State3
Gene	(mu-	(wild	(P-N)	(can-		(nor-
	\ \	\	(r-1v)	\	(pre-	\
	tant)	type)		cer)	malig-	mal $)$
					nant)	
TP53(x1)	0	1	0.5	0	0.8	1
ATR(x2)	0	1	0.5	0	0.8	1
ATM(x3)	0	1	0.5	0	0.8	1
BRAC1(x4)	0	1	0.5	0	0.8	1
HER2(x5)	1	0	0.5	1	0.8	0
MDM2(x6)	1	0	0.5	1	0.8	0
CHEK1(x7)	0	1	0.5	0	0.8	1
AKT1(x8)	1	0	0.5	1	0.8	0
P21(x9)	1	0	0.5	1	0.8	0
CDK2(x10)	1	0	0.5	1	0.8	0

${\bf Wild\text{-}Type}$

Table 2: Attractors with 1 state(s)

	Table 2. Horacols with I brace(b)				
	Attr. 1	Attr. 2			
x1	0	0			
x2	0	1			
$egin{array}{c} x2 \\ x3 \end{array}$	0	0			
x4	0	1			
x5	0	0			
x6	0	0			
x7	0	1			
x8	0	0			
x9	0	0			
x10	0	0			
Freq.	32.81%	1.56%			

Table 3: Attractors with 2 state(s)



x1 KO

Table 4: Attractors with 1 state(s)

	Attr. 1	Attr. 2
x1	0	0
x2	0	1
x3	0	0
x2 x3 x4 x5	0	1
x5	0	0
x 6	0	0
x6 x7 x8	0	1
x8	0	0
x9	0	0
x10	0	0
Freq.	32.81%	1.56%

Table 5: Attractors with 2 state(s)

Table 9. Hittlactors with 2 state(s)				
	Attr. 3		Att	r. 4
$\mathbf{x1}$	0	0	0	0
$\mathbf{x2}$	1	0	0	0
x3	0	0	0	0
x4	0	1	0	0
x5	0	0	1	1
x6	0	0	0	0
x7	0	0	0	0
x8	0	0	1	1
x9	0	0	1	1
x10	0	0	0	1
Freq.	15.62	2%	50)%

x1 OE

Table 6: Attractors with 1 state(s)

	Attr. 1	Attr. 2	Attr. 3	Attr. 4
x1	1	1	1	1
x2	0	1	0	1
x3	1	1	1	1
x4	0	1	0	1
x5	0	0	1	1
x 6	0	0	0	0
x7	0	1	0	1
x 8	0	0	0	0
x9	0	0	0	0
x10	0	0	0	0
Freq.	32.81%	1.56%	32.81%	1.56%

Table 7: Attractors with 2 state(s)

	At	tr. 5	Att	r. 6
x1	1	1	1	1
$\mathbf{x2}$	1	0	1	0
x3	1	1	1	1
x4	0	1	0	1
x5	0	0	1	1
x6	0	0	0	0
x7	0	0	0	0
x8	0	0	0	0
x9	0	0	0	0
x10	0	0	0	0
Freq.	15.	.62%	15.0	62%

x2 KO

Table 8: Attractors with 1 state(s)

	Attr. 1
$\mathbf{x1}$	0
$\mathbf{x2}$	0
x3	0
x4	0
x1 x2 x3 x4 x5 x6 x7 x8 x9	0
x6	0
x7	0
x8	0
x9	0
x10	0
Freq.	50%

Table 9: Attractors with 2 state(s)

		A++m 2
	4	Attr. 2
x1	0	0
$\mathbf{x2}$	0	0
x3	0	0
x1 x2 x3 x4 x5	0	0
	1	1
x6	0	0
x7	0	0
x8	1	1
x9	1	1
x10	0	1
Freq.		50%
Freq.		50%

x2 OE

Table 10: Attractors with 1 state(s)

	()
	Attr. 1
x1	0
$\mathbf{x2}$	1
x1 x2 x3 x4 x5 x6 x7 x8 x9	0
x4	1
x5	0
x6	0
x7	1
x8	0
x9	0
x10	Ō
Freq.	50%

Table 11: Attractors with 2 state(s)

		Attr. 2
x1	0	0
x2 x3	1	1
x3	0	0
x4 x5	0	0
x5	1	1
x6 x7 x8	0	0
x7	0	0
x8	1	1
x9	1	1
x10	0	1
Freq.		50%

x3 KO

Table 12: Attractors with 1 state(s)

	4	
	Attr. 1	Attr. 2
x1	0	0
$\mathbf{x2}$	0	1
x2 x3 x4 x5	0	0
x4	0	1
x5	0	0
x6	0	0
x 7	0	1
x6 x7 x8	0	0
x9	0	0
x10	0	0
Freq.	32.81%	1.56%

Table 13: Attractors with 2 state(s)

Table 19. Hittlactors with 2 state(s)				
	Attr.	Attr. 3		r. 4
x1	0	0	0	0
x2	1	0	0	0
x3	0	0	0	0
x4	0	1	0	0
x5	0	0	1	1
x6	0	0	0	0
x7	0	0	0	0
x8	0	0	1	1
x9	0	0	1	1
x10	0	0	0	1
Freq.	15.62	%	50	%

x3 OE

Table 14: Attractors with 1 state(s)

	Attr. 1	Attr. 2
x1		0
v2	0	1
x2 x3	1	1
x4	0	1
x4 x5 x6 x7 x8	0	1
x5	0	0
x0 7	0	1
X/	0	
x8	0	0
x9	0	0
x10	0	0
Freq.	32.81%	1.56%

Table 15: Attractors with 2 state(s)

	1451c 19. 110114cto15 With 2 5040c(5)			
	Attr.	3	Att	r. 4
x1	0	0	0	0
$\mathbf{x2}$	1	0	0	0
x3	1	1	1	1
x4	0	1	0	0
x5	0	0	1	1
x6	0	0	0	0
x7	0	0	0	0
x8	0	0	1	1
x9	0	0	1	1
x10	0	0	0	1
Freq.	15.62	2%	50	0%

x4 KO

Table 16: Attractors with 1 state(s)

	()
	Attr. 1
$\mathbf{x1}$	0
$\mathbf{x2}$	0
x3	0
x4	0
x5	0
x6	0
x7	0
x8	0
x1 x2 x3 x4 x5 x6 x7 x8 x9	0
x10	0
Freq.	50%

Table 17: Attractors with 2 state(s)

		Attr. 2
x1	0	0
x2	0	0
x1 x2 x3	0	0
x4	0	0
x5	1	1
x6 x7 x8	0	0
x7	0	0
x8	1	1
x9	1	1
x10	0	1
Freq.		50%

x4 OE

Table 18: Attractors with 1 state(s)

	()
	Attr. 1
x1	0
$\mathbf{x2}$	1
x1 x2 x3 x4 x5 x6 x7 x8 x9	0
x4	1
x5	0
x6	0
x7	1
x8	0
x9	0
x10	Ō
Freq.	50%

Table 19: Attractors with 2 state(s)

		Attr. 2
x1	0	0
x2	1	1
x2 x3 x4 x5	0	0
x4	1	1
x5	1	1
x6 x7 x8 x9	0	0
x7	0	0
x8	1	1
x9	1	1
x10	0	1
Freq.		50%

x5 KO

Table 20: Attractors with 1 state(s)

	Attr. 1	Attr. 2
x1	0	0
x2 x3 x4 x5 x6 x7 x8 x9	0	1
x3	0	0
x4	0	1
x5	0	0
x6	0	0
x7	0	1
x8	0	0
x9	0	0
x10	0	0
Freq.	65.62%	3.12%

Table 21: Attractors with 2 state(s)

	At	tr. 3
x1	0	0
x2	1	0
x2 x3	0	0
x4 x5	0	1
x5	0	0
x6	0	0
x7	0	0
x6 x7 x8	0	0
x9	0	0
x10	0	0
Freq.	31	.25%

x5 OE

Table 22: Attractors with 2 state(s)

	A	ttr. 1
$\mathbf{x1}$	0	0
$\mathbf{x2}$	0	0
x3	0	0
x1 x2 x3 x4 x5	0	0
x5	1	1
x6 x7	0	0
x7	0	0
x8	1	1
x9	1	1
x10	0	1
Freq.		100%

x6 KO

Table 23: Attractors with 1 state(s)

	Attr. 1 Attr. 2				
1	0	0			
$\mathbf{x1}$	U	U			
$\mathbf{x2}$	0	1			
x3	0	0			
x2 x3 x4	0	1			
x5	0	0			
x6 x7	0	0			
x7	0	1			
x8	0	0			
x9	0	0			
x10	0	0			
Freq.	32.81%	1.56%			

Table 24: Attractors with 2 state(s)

	Table 21. Horacoll with 2 state(s)				
	Attr.	3	Att	r. 4	
x1	0	0	0	0	
$\mathbf{x2}$	1	0	0	0	
x3	0	0	0	0	
x4	0	1	0	0	
x5	0	0	1	1	
x6	0	0	0	0	
x7	0	0	0	0	
x8	0	0	1	1	
x9	0	0	1	1	
x10	0	0	0	1	
Freq.	15.62	%	50	0%	

x6 OE

Table 25: Attractors with 1 state(s)

Table 26: Attractors with 2 state(s)

	Attr.	3	Att	r. 4
x1	0	0	0	0
x2	1	0	0	0
x3	0	0	0	0
x4	0	1	0	0
x 5	0	0	1	1
x 6	1	1	1	1
x7	0	0	0	0
x8	0	0	1	1
x 9	0	0	1	1
x10	0	0	0	1
Freq.	15.62	%	50	%

x7 KO

Table 27: Attractors with 1 state(s)

	Attr. 1	Attr. 2
x1	0	0
$\mathbf{x2}$	0	1
x3	0	0
x2 x3 x4 x5	0	1
x5	0	0
${f x6} \\ {f x7}$	0	0
x7	0	0
x8 x9	0	0
x9	0	0
x10	0	0
Freq.	32.81%	1.56%

Table 28: Attractors with 2 state(s)

	Attr.	3	Att	r. 4
x1	0	0	0	0
$\mathbf{x2}$	1	0	0	0
x3	0	0	0	0
x4	0	1	0	0
x5	0	0	1	1
x6	0	0	0	0
x7	0	0	0	0
x8	0	0	1	1
x9	0	0	1	1
x10	0	0	0	1
Freq.	15.62	2%	50	%

x7 OE

Table 29: Attractors with 1 state(s)

	i dole 20. iii diactors	
	Attr. 1	Attr. 2
x1	0	0
x2	0	1
x3	0	0
x2 x3 x4	0	1
x5	0	0
x6	0	0
${f x6} \\ {f x7}$	1	1
x8	0	0
x9	0	0
x10	0	0
Freq.	32.81%	1.56%

Table 30: Attractors with 2 state(s)

	10010	90: 11001000010	With 2 Beate(b)	
	Attr.	3	Att	r. 4
x1	0	0	0	0
$\mathbf{x2}$	1	0	0	0
x3	0	0	0	0
x4	0	1	0	0
x5	0	0	1	1
x6	0	0	0	0
x7	1	1	1	1
x8	0	0	1	1
x 9	0	0	1	1
x10	0	0	0	1
Freq.	15.62	%	50	0%

x8 KO

Table 31: Attractors with 1 state(s)

	Attr. 1	Attr. 2
x1	0	0
$\mathbf{x2}$	0	1
x3	0	0
x2 x3 x4 x5	0	1
x5	0	0
x6	0	0
${f x6} \\ {f x7}$	0	1
x8 x9	0	0
x9	0	0
x10	0	0
Freq.	21.88%	3.12%

Table 32: Attractors with 2 state(s)

Table 92. Horacoll with 2 state(s)						
	Attr	. 3	Attr	. 4	Attr	. 5
x1	0	0	0	0	0	0
$\mathbf{x2}$	1	0	0	0	1	0
x3	0	0	0	0	0	0
x4	0	1	0	0	0	1
x5	0	0	1	1	1	1
x 6	0	0	0	0	0	0
x 7	0	0	0	0	0	0
x8	0	0	0	0	0	0
x9	0	0	1	1	1	1
x10	0	0	0	1	0	1
Freq.	25'	%	31.2	5%	18.7	5%

x8 OE

Table 33: Attractors with 1 state(s)

	Attr. 1
$\mathbf{x1}$	0
$\mathbf{x2}$	0
x1 x2 x3 x4 x5 x6 x7 x8 x9	0
x4	0
x5	0
x6	0
x7	0
x8	1
x9	0
x10	0
Freq.	50%

Table 34: Attractors with 2 state(s)

		Attr. 2
x1	0	0
$\mathbf{x2}$	0	0
x3	0	0
x4	0	0
x5	1	1
x6	0	0
x7	0	0
x8	1	1
x9	1	1
x10	0	1
Freq.		50%

x9 KO

Table 35: Attractors with 1 state(s)

	Attr. 1	Attr. 2	Attr. 3	Attr. 4
x1	0	0	0	0
x2	0	1	0	1
x3	0	0	0	0
x4	0	1	0	1
x5	0	0	1	1
x6	0	0	0	0
x7	0	1	0	1
x8	0	0	0	0
x9	0	0	0	0
x10	0	0	0	0
Freq.	21.88%	3.12%	21.88%	3.12%

Table 36: Attractors with 2 state(s)

		30. 11001000010		
	Attr.	5	Att	r. 6
x1	0	0	0	0
$\mathbf{x2}$	1	0	1	0
x3	0	0	0	0
x4	0	1	0	1
x5	0	0	1	1
x6	0	0	0	0
x 7	0	0	0	0
x8	0	0	0	0
x9	0	0	0	0
x10	0	0	0	0
Freq.	25%	,)	25	%

x9 **O**E

Table 37: Attractors with 2 state(s)

	Attr.	1	Att	r. 2
x1	0	0	0	0
x2	0	0	0	0
x3	0	0	0	0
x4	0	0	0	0
x5	0	0	1	1
x 6	0	0	0	0
x 7	0	0	0	0
x8	1	1	1	1
x9	1	1	1	1
x10	0	1	0	1
Freq.	50%	6	50)%

x10 KO

Table 38: Attractors with 1 state(s)

	Attr. 1	Attr. 2	Attr. 3
x1	0	0	0
$egin{array}{c} x2 \\ x3 \end{array}$	0	1	0
x3	0	0	0
x4	0	1	0
x5	0	0	1
x6	0	0	0
x7	0	1	0
x8	0	0	1
x9	0	0	1
x10	0	0	0
Freq.	28.12%	3.12%	50%

Table 39: Attractors with 2 state(s)

		Attr. 4
$\mathbf{x1}$	0	0
$\mathbf{x2}$	1	0
x3	0	0
x4	0	1
x5	0	0
x6	0	0
x7	0	0
x8	0	0
x9	0	0
x10	0	0
Freq.		18.75%

x10 OE

Table 40: Attractors with 1 state(s)

	Attr. 1	Attr. 2
	Atti. 1	Attl. Z
$\mathbf{x}1$	0	0
$\mathbf{x2}$	0	0
x3	0	0
x 4	0	0
x2 x3 x4 x5	0	1
x6 x7	0	0
x7	0	0
x8	0	1
$\mathbf{x}9$	0	1
x10	1	1
Freq.	50%	50%