

**Table 1: New York State Molecular Oncology Proficiency Test - February 2008**  
**Summary of results**

Sample		Overall diagnosis: B-cell clone (IGH and IGK rearrangements) with presence of EBV																						
Assay	NYS#L/L 1 (2-08)				PCR				RT-PCR				FISH				All methods			Method used				
	R	G	ind	Cons	R	G	ind	Cons	R	G	ind	Cons	R	G	ind	Cons	R	G	Cons	SB	PCR	RT-PCR (qualitative)	RT-PCR (quantitative)	FISH
IGH	4			R	19	3		R				I	2			R	25	3	R	Dako (2), home brew (2)	Biomed (7), home brew (10), IVS (5)			Vysis (1), unk (1)
IGK	3			R	6			R				I				I	9	0	R	Dako (1), home brew (2)	Biomed (3), home brew(1), IVS (2)			
IGL		1		I				I				I				I	0	1	I	home brew (1)				
TRB	2	4		G	4	2		R				I				I	6	6	G/R	home brew (3), Dako (3)	Biomed (5), unk (1)			
TRG				I		24		G				I				I	0	24	G		Biomed (4), home brew (16), IVS (4)			
TRD		1		I				I				I				I	0	1	I	home brew (1)				
IGH/BCL2	MBR		1	I		13		G				I				I	0	14	G	home brew (1)	Biomed (2), IVS (1), home brew (10)			
	mcr			I		11		G				I				I	0	11	G		Biomed (2), IVS (1), home brew (6)			
	MBR 3'			I		2		G				I				I	0	2	G		Biomed (2)			
	MBR/mcr			I				I				I	3			G	0	3	G					
IGH/CCND1 (1)	(Bcl-1)		1	I		6		G				I	3			G	0	10	G	home brew (1)	home brew (5), IVS (1)			Vysis (2), unk (1)
BCR/ABL1	p210		1	I		2		G	21			G				I	0	24	G	home brew (1)	home brew (2)	home brew (3)	Ipsogen (2), home brew (15), Cepheid (1)	
	p190			I		1		I	17			G				I	0	18	G		home brew (1)	home brew (5)	Ipsogen (1), home brew (11)	
	p210/190			I				I	7			G	3			G	0	10	G			Roche (2)	home brew (4), Roche (1)	Vysis (2), unk (1)
Abl kinase domain mutation				I				I				I				I	0	0	I					
PML/RARA	Long			I				I	14			G				I	0	14	G			home brew (7), IVS (1)	home brew (6)	
	Short			I				I	12			G				I	0	12	G			home brew (6)	home brew (6)	
	Variable			I				I	5			G				I	0	5	G			home brew (1)	home brew (4)	
	Long/Short/Variable			I				I				I	2			G	0	2	G					Vysis (1), unk (1)
MYC t(8;14)				I				I				I	3			G	0	3	G					Vysis (2), unk (1)
AML1/ETO t(8;21)				I				I	5			G	1			I	0	6	G			home brew (4)	home brew (1)	Vysis (1)
NPM/ALK t(2;5)				I				I	1			I	1			I	0	2	G			home brew (1)		Vysis (1)
NPM 1 mutation				I		7		G				I				I	0	7	G		home brew (2), unk (5)			
ETV6/RUNX1 (TEL/AML1)				I				I				I				I	0	0	I					
EBV				I	4			R				I				I	4	0	R		Roche (2), home brew (2)			
KSHV/HHV8				I		3		G				I				I	0	3	G		home brew (3)			
HTLV1				I		2		G				I				I	0	2	G		home brew (2)			
CBFB				I				I	3			G	2			G	0	5	G			home brew (2)	home brew (1)	Vysis (1), unk (1)
E2A-PBX t(1;19)				I				I				I				I	0	0	I					
MLL				I				I	1			I	2			G	0	3	G			home brew (1)		Vysis (1), unk (1)
JAK2	V617F			I		27		G	2			G				I	0	29	G		homebrew(20), Ipsogen (2), IVS (4), Eragen (1)	home brew (2)		
JAK2	EXON 12			I		1		I	1			I				I	2		G		IVS (1)	home brew (1)		
FLT3	ITD			I		18		G				I				I	0	18	G		IVS (4), home brew (13), unk (1)			
FLT3	D835			I		16		G				I				I	0	16	G		IVS (4), home brew (11), unk (1)			
P53				I		2		G				I				I	0	2	G		home brew (2)			
IgV <sub>H</sub> mutation (IGHV)				I	1	3		G	1			I				I	1	4	G		home brew (3), IVS (1)	home brew (1)		
c-kit				I		3		G				I				I	0	3	G		home brew (3)			
IGH/BCL6				I				I				I	2			G	0	2	G					Vysis (2)
Other: RARA, MYC, ALK, Bcl-6, CLL, MDS				I				I				I	8			I	0	8	I					Vysis (1), unk (1)

**Table 2: New York State Molecular Oncology Proficiency Test - February 2008**  
**Summary of results**

Sample	NYS#L/L 2 (2-08)																Overall diagnosis: T-cell clone with TRB and TRG rearrangements										
	SB				PCR				RT-PCR				FISH				All methods			Method used		RT-PCR (qualitative)	RT-PCR (quantitative)	FISH			
	R	G	ind	Cons	R	G	ind	Cons	R	G	ind	Cons	R	G	ind	Cons	R	G	Cons	SB	PCR						
IGH		5		<b>G</b>	20			<b>G</b>				<b>I</b>	2			<b>G</b>	0	27	<b>G</b>	Dako (2), home brew (3)	Biomed (7), home brew (9), IVS (4)				Vysis (1), unk (1)		
IGK		3		<b>G</b>	6			<b>G</b>				<b>I</b>				<b>I</b>	0	9	<b>G</b>	Dako (1), home brew (2)	Biomed (3), home brew (1), IVS (1)						
IGL		1		<b>I</b>				<b>I</b>				<b>I</b>				<b>I</b>	0	1	<b>I</b>	home brew (1)							
TRB		6		<b>R</b>	6			<b>R</b>				<b>I</b>				<b>I</b>	12	0	<b>R</b>	home brew (3), Dako (3)	Biomed (5), unk (1)						
TRG				<b>I</b>	25			<b>R</b>				<b>I</b>				<b>I</b>	25	0	<b>R</b>	home brew (1)	Biomed (4), home brew (16), IVS (5)						
TRD		1		<b>I</b>				<b>I</b>				<b>I</b>				<b>I</b>	0	1	<b>I</b>	home brew (1)							
IGH/BCL2	MBR		1	<b>I</b>	13			<b>G</b>				<b>I</b>				<b>I</b>	0	14	<b>G</b>	home brew (1)	Biomed (2), IVS (1), home brew (10)						
	mcr			<b>I</b>	11			<b>G</b>				<b>I</b>				<b>I</b>	0	11	<b>G</b>		Biomed (2), IVS (1), home brew (8)						
	MBR 3'			<b>I</b>	2			<b>G</b>				<b>I</b>				<b>I</b>	0	2	<b>G</b>		Biomed (2)						
	MBR/mcr			<b>I</b>				<b>I</b>				<b>I</b>	3			<b>G</b>	0	3	<b>G</b>								
IGH/CCND1 (Bcl-1)		1		<b>I</b>	6			<b>G</b>				<b>I</b>	3			<b>G</b>	0	10	<b>G</b>	home brew (1)	home brew (5), IVS (1)				Vysis (2), unk (1)		
BCR/ABL1	p210		1	<b>I</b>	2			<b>G</b>	21			<b>G</b>				<b>I</b>	0	24	<b>G</b>	home brew (1)	home brew (2)	home brew (3)	ipsogen (2), home brew (15), Cepheid (1)				
	p190			<b>I</b>	1			<b>I</b>	17			<b>G</b>				<b>I</b>	0	18	<b>G</b>		home brew (1)	home brew (5)	ipsogen (1), home brew (11)				
	p210/190			<b>I</b>				<b>I</b>	7			<b>G</b>	3			<b>G</b>	0	10	<b>G</b>			Roche (2)	home brew (4), Roche (1)	Vysis (2), unk (1)			
Abl kinase domain mutation			<b>I</b>				<b>I</b>				<b>I</b>				<b>I</b>	0	0	<b>I</b>									
PML/RARA	Long			<b>I</b>				<b>I</b>	13			<b>G</b>				<b>I</b>	0	13	<b>G</b>				home brew (7), IVS (1)	home brew (5)			
	Short			<b>I</b>				<b>I</b>	11			<b>G</b>				<b>I</b>	0	11	<b>G</b>				home brew (6)	home brew (5)			
	Variable			<b>I</b>				<b>I</b>	5			<b>G</b>				<b>I</b>	0	5	<b>G</b>				home brew (1)	home brew (4)			
Long/Short/Variable			<b>I</b>				<b>I</b>				<b>I</b>	3			<b>G</b>	0	3	<b>G</b>							Vysis (2), unk (1)		
MYC t(8;14)			<b>I</b>				<b>I</b>				<b>I</b>	3			<b>G</b>	0	3	<b>G</b>							Vysis (2), unk (1)		
AML1/ETO t(8;21)			<b>I</b>				<b>I</b>	5			<b>G</b>	3			<b>G</b>	0	8	<b>G</b>				home brew (4)	home brew (1)	Vysis (2), unk (1)			
NPM/ALK t(2;5)			<b>I</b>				<b>I</b>	1			<b>I</b>	1			<b>I</b>	0	2	<b>G</b>				home brew (1)		Vysis (1)			
NPM 1 mutation			<b>I</b>		7		<b>G</b>				<b>I</b>				<b>I</b>	0	7	<b>G</b>		home brew (2), unk (5)							
ETV6/RUNX1 (TEL/AML1)			<b>I</b>				<b>I</b>				<b>I</b>				<b>I</b>	0	0	<b>I</b>									
EBV			<b>I</b>		4		<b>G</b>				<b>I</b>				<b>I</b>	0	4	<b>G</b>		Roche (2), home brew (2)							
KSHV/HHV8			<b>I</b>		3		<b>G</b>				<b>I</b>				<b>I</b>	0	3	<b>G</b>		home brew (3)							
HTLV1			<b>I</b>		2		<b>G</b>				<b>I</b>				<b>I</b>	0	2	<b>G</b>		home brew (2)							
CBFB			<b>I</b>				<b>I</b>	3			<b>G</b>	3			<b>G</b>	0	6	<b>G</b>				home brew (2)	home brew (1)	Vysis (2), unk (1)			
E2A-PBX t(1;19)			<b>I</b>				<b>I</b>				<b>I</b>				<b>I</b>	0	0	<b>I</b>									
MLL			<b>I</b>				<b>I</b>	1			<b>I</b>	3			<b>G</b>	0	4	<b>G</b>				home brew (1)		Vysis (2), unk (1)			
JAK2 V617F			<b>I</b>		27		<b>G</b>	2			<b>G</b>				<b>I</b>	0	29	<b>G</b>		homebrew(20) ipsogen (2), IVS (4), Eragen (1)	home brew (2)						
JAK2 EXON 12			<b>I</b>				<b>I</b>	1			<b>I</b>				<b>I</b>			<b>G</b>			home brew (1)						
FLT3 ITD			<b>I</b>		18		<b>G</b>				<b>I</b>				<b>I</b>	0	18	<b>G</b>		IVS (4), home brew (13), unk (1)							
FLT3 D835			<b>I</b>		16		<b>G</b>				<b>I</b>				<b>I</b>	0	16	<b>G</b>		IVS (4), home brew (11), unk (1)							
P53			<b>I</b>	1	1		<b>I</b>				<b>I</b>	2			<b>G</b>	1	3	<b>I/G</b>		home brew (2)					Vysis (1), unk (1)		
IgV <sub>H</sub> mutation (IGHV)			<b>I</b>		3		<b>G</b>	1			<b>I</b>				<b>I</b>	0	4	<b>G</b>		home brew (2), IVS (1)	home brew (1)						
c-kit			<b>I</b>		3		<b>G</b>				<b>I</b>				<b>I</b>	0	3	<b>G</b>		home brew (3)							
IGH/BCL6			<b>I</b>				<b>I</b>				<b>I</b>	2			<b>G</b>	0	2	<b>G</b>							Vysis (2)		
Other: RARA, MYC, ALK, Bcl-6, RB1, ATM, -5/5q-, 8, 20q12, 12, CLL, MDS			<b>I</b>				<b>I</b>				<b>I</b>	12			<b>I</b>	0	12	<b>I</b>							Vysis (2), unk (1)		

**Table 3: New York State Molecular Oncology Proficiency Test - February 2008**  
**Summary of results**

Sample	NYS#L/L 3 (2-08)												Overall diagnosis: T-cell clone with TRB and TRG rearrangements												Method used	SB	PCR	RT-PCR (qualitative)	RT-PCR (quantitative)	FISH
	SB				PCR				RT-PCR				FISH				All methods													
	R	G	ind	Cons	R	G	ind	Cons	R	G	ind	Cons	R	G	ind	Cons	R	G	Cons											
IGH		5		<b>G</b>	1	20		<b>G</b>				<b>I</b>		2		<b>G</b>	1	27	<b>G</b>	Dako (2), home brew (3)	Biomed (7), home brew (11), IVS (3)				Vysis (1), unk (1)					
IGK		3		<b>G</b>		6		<b>G</b>				<b>I</b>				<b>I</b>	0	9	<b>G</b>	Dako (1), home brew (2)	Biomed (3), home brew (1), IVS (2)									
IGL		1		<b>I</b>				<b>I</b>				<b>I</b>				<b>I</b>	0	1	<b>I</b>	home brew (1)										
TRB		5		<b>R</b>	6			<b>R</b>				<b>I</b>				<b>I</b>	11	0	<b>R</b>	home brew (3), Dako (2)	Biomed (5), unk (1)									
TRG				<b>I</b>	25			<b>R</b>				<b>I</b>				<b>I</b>	25	0	<b>R</b>	home brew (1)	Biomed (4), home brew (16), IVS (5)									
TRD		1		<b>I</b>				<b>I</b>				<b>I</b>				<b>I</b>	0	1	<b>I</b>	home brew (1)										
IGH/BCL2	MBR	1		<b>I</b>	13			<b>G</b>				<b>I</b>				<b>I</b>	0	14	<b>G</b>	home brew (1)	Biomed (2), IVS (1), home brew (10)									
	mcr			<b>I</b>	11			<b>G</b>				<b>I</b>				<b>I</b>	0	11	<b>G</b>		Biomed (2), IVS (1), home brew (8)									
	MBR 3'			<b>I</b>	2			<b>G</b>				<b>I</b>				<b>I</b>	0	2	<b>G</b>		Biomed (2)									
	MBR/mcr			<b>I</b>				<b>I</b>				<b>I</b>	3			<b>G</b>	0	3	<b>G</b>											
IGH/CCND1	(Bcl-1)	1		<b>I</b>	6			<b>G</b>				<b>I</b>	3			<b>G</b>	0	10	<b>G</b>	home brew (1)	home brew (5), IVS (1)				Vysis (2), unk (1)					
BCR/ABL1	p210	1		<b>I</b>	2			<b>G</b>	21			<b>G</b>				<b>I</b>	1	23	<b>G</b>	home brew (1)	home brew (2)	home brew (3)	ipsogen (2), home brew (15), Cepheid (1)							
	p190			<b>I</b>	1			<b>I</b>	17			<b>G</b>				<b>I</b>	0	18	<b>G</b>		home brew (1)	home brew (5)	ipsogen (1), home brew (11)							
	p210/190			<b>I</b>				<b>I</b>	7			<b>G</b>	3			<b>G</b>	0	10	<b>G</b>			Roche (2)	home brew (4), Roche (1)	Vysis (2), unk (1)						
	Abl kinase domain mutation			<b>I</b>				<b>I</b>				<b>I</b>				<b>I</b>	0	0	<b>I</b>											
PML/RARA	Long			<b>I</b>				<b>I</b>	13			<b>G</b>				<b>I</b>	0	13	<b>G</b>			home brew (7), IVS (1)	home brew (5)							
	Short			<b>I</b>				<b>I</b>	11			<b>G</b>				<b>I</b>	0	11	<b>G</b>			home brew (6)	home brew (5)							
	Variable			<b>I</b>				<b>I</b>	5			<b>G</b>				<b>I</b>	0	5	<b>G</b>			home brew (1)	home brew (4)							
	Long/Short/Variable			<b>I</b>				<b>I</b>				<b>I</b>	3			<b>G</b>	0	3	<b>G</b>						Vysis (2), unk (1)					
MYC t(8;14)				<b>I</b>				<b>I</b>				<b>I</b>	3			<b>G</b>	0	3	<b>G</b>						Vysis (2), unk (1)					
AML1/ETO t(8;21)				<b>I</b>				<b>I</b>	4			<b>G</b>	3			<b>G</b>	0	7	<b>G</b>			home brew (4)			Vysis (2), unk (1)					
NPM/ALK t(2;5)				<b>I</b>				<b>I</b>	1			<b>I</b>	1			<b>I</b>	0	2	<b>G</b>			home brew (1)			Vysis (1)					
NPM 1 mutation				<b>I</b>	7			<b>G</b>				<b>I</b>				<b>I</b>	0	7	<b>G</b>		home brew (2), unk (5)									
ETV6/RUNX1 (TEL/AML1)				<b>I</b>				<b>I</b>				<b>I</b>				<b>I</b>	0	0	<b>I</b>											
EBV				<b>I</b>	4			<b>G</b>				<b>I</b>				<b>I</b>	0	4	<b>G</b>		Roche (2), home brew (2)									
KSHV/HHV8				<b>I</b>	3			<b>G</b>				<b>I</b>				<b>I</b>	0	3	<b>G</b>			home brew (3)								
HTLV1				<b>I</b>	2			<b>G</b>				<b>I</b>				<b>I</b>	0	2	<b>G</b>			home brew (2)								
CBFB				<b>I</b>				<b>I</b>	2			<b>G</b>	3			<b>G</b>	0	5	<b>G</b>			home brew (2)			Vysis (2), unk (1)					
E2A-PBX t(1;19)				<b>I</b>				<b>I</b>				<b>I</b>				<b>I</b>	0	0	<b>I</b>											
MLL				<b>I</b>				<b>I</b>	1			<b>I</b>	3			<b>G</b>	0	4	<b>G</b>			home brew (1)			Vysis (2), unk (1)					
JAK2	V617F			<b>I</b>	27			<b>G</b>	2			<b>G</b>				<b>I</b>	0	29	<b>G</b>		homebrew(20) ipsogen (2), IVS (4), Eragen (1)	home brew (2)								
JAK2	EXON 12			<b>I</b>				<b>I</b>	1			<b>I</b>				<b>I</b>			<b>G</b>			home brew (1)								
FLT3	ITD			<b>I</b>	18			<b>G</b>				<b>I</b>				<b>I</b>	0	18	<b>G</b>		IVS (4), home brew (13), unk (1)									
FLT3	D835			<b>I</b>	16			<b>G</b>				<b>I</b>				<b>I</b>	0	16	<b>G</b>		IVS (4), home brew (11), unk (1)									
P53				<b>I</b>	1	1		<b>I</b>				<b>I</b>	2			<b>G</b>	1	3	<b>G</b>		home brew (2)				Vysis (1), unk (1)					
IgV <sub>H</sub> mutation (IGHV)				<b>I</b>	3			<b>G</b>	1			<b>I</b>				<b>I</b>	0	4	<b>G</b>		home brew (2), IVS (1)	home brew (1)								
c-kit				<b>I</b>	3			<b>G</b>				<b>I</b>				<b>I</b>	0	3	<b>G</b>		home brew (3)									
IGH/BCL6				<b>I</b>				<b>I</b>				<b>I</b>	1			<b>I</b>	0	1	<b>I</b>						Vysis (1)					
Other: RARA, MYC, ALK, Bcl-6, RB1, ATM, -5/5q-, 8, 20q12, 12, CLL, MDS				<b>I</b>				<b>I</b>				<b>I</b>	12			<b>I</b>	0	12	<b>I</b>						Vysis (2), unk (1)					