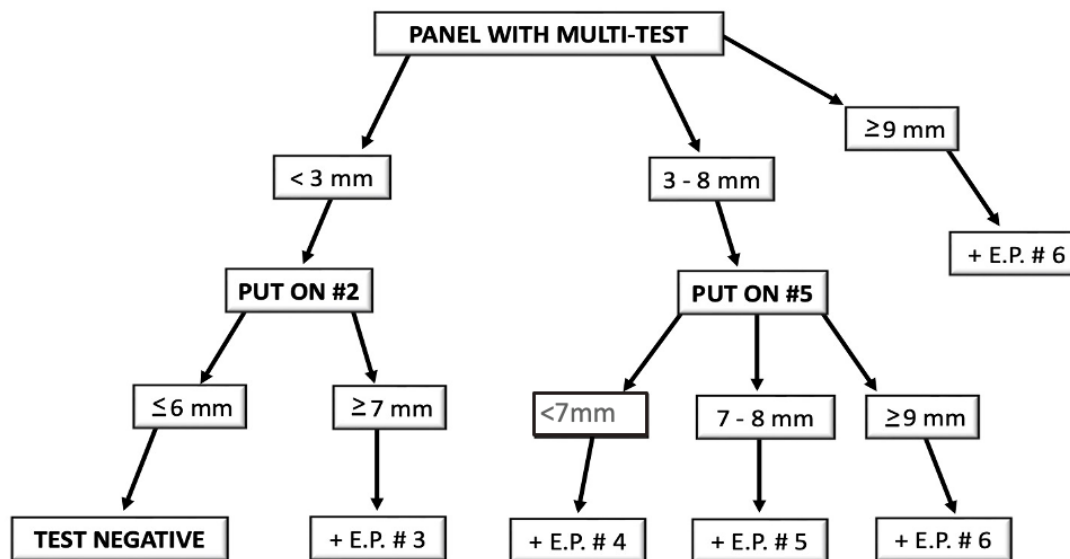


Worksheet 1: MQT Problem

Using SPT Endpoints (EP), determine dilution of intradermal test necessary to complete MQT. Refer to algorithm below.

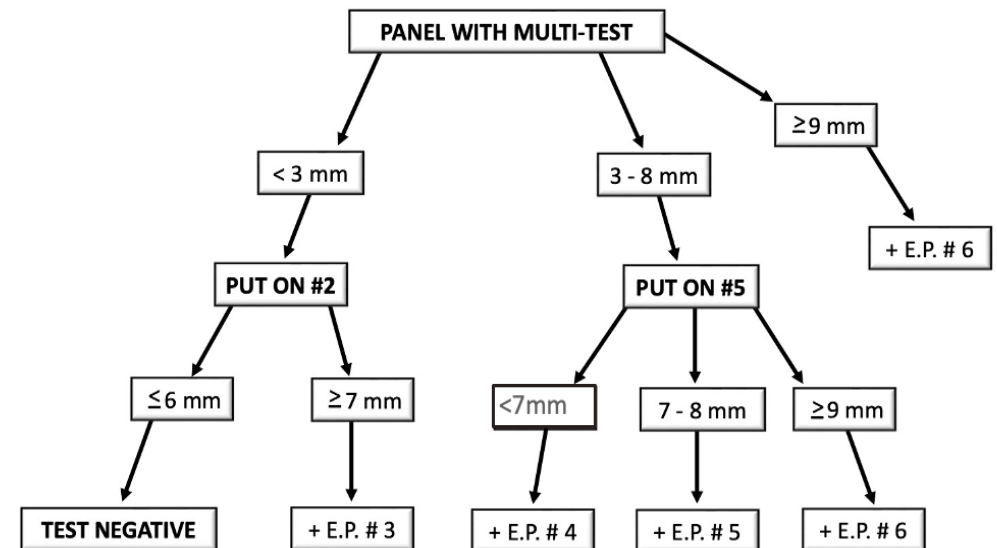
Control/Ag	SPT mm	MQT dilution
PNS	0	
Glycerin	0	
Histamine	5	
Bermuda	4	
Timothy	9	
Ragweed	2	
Pigweed	4	
Marsh Elder	2	
Oak	3	
Elm	2	
Mt. Cedar	2	
Alternaria	4	
Cladosporium	2	
Helminthosporium	2	
D. farinae	5	
Cat	4	



Adapted from Krouse JH, Mabry RL. Skin testing for inhalant allergy 2003: current strategies. Otolaryngol Head Neck Surg. 2003 Oct;129(4 Suppl):S33-49.

Now determine the endpoints using the intradermal result.

Control/Ag	SPT mm	MQT dilution	Intradermal mm	Endpoint (EP)
PNS	0			
Glycerin	0			
Histamine	5			
Bermuda	4	5	8	
Timothy	9	X	X	
Ragweed	2	2	5	
Pigweed	4	5	5	
Marsh Elder	2	2	5	
Oak	3	5	6	
Elm	2	2	7	
Mt. Cedar	2	2	5	
Alternaria	4	5	5	
Cladosporium	2	2	8	
Helminthosporium	2	2	7	
D. farinae	5	5	7	
Cat	4	5	8	



Adapted from Krouse JH, Mabry RL. Skin testing for inhalant allergy 2003: current strategies. Otolaryngol Head Neck Surg. 2003 Oct;129(4 Suppl):S33-49.

Based on the endpoints, create 2 versions of SCIT vials, 1a will be using PNS and glycerin (goal is at least 10% glycerin, remember that stock glycerin is 50%). Create two 5 ml SCIT treatment vials, separate them into strong (dilution 5-6) and weak (1-4) Antigens.

					Vial 1 = endpoints #1 thru #4		Vial 2 = endpoints #5 thru #6	
Control/Ag	SPT mm	MQT Dilution	ID mm	EP	Ag Dilution	Ag Volume	Ag Dilution	Ag Volume
PNS	0							
Glycerin	0							
Histamine	5							
Bermuda	4	5	8	5				
Timothy	9	X	X	6				
Ragweed	2	2	5	Neg				
Pigweed	4	5	5	4				
Marsh Elder	2	2	5	Neg				
Oak	3	5	6	4				
Elm	2	2	7	3				
Mt. Cedar	2	2	5	Neg				
Alternaria	4	5	5	4				
Cladosporium	2	2	8	3				
Helminthosporium	2	2	7	3				
D. farinae	5	5	7	5				
Cat	4	5	8	5				
*Make 5cc vials using glycerin as preservative *Determine Ag dilution to use -Go “2 to the right” *Calculate total antigen volume *Write in diluent to use. *Calculate volumes of preservative and diluent			Total Ag Volume Vial 1				Total Ag Volume Vial 2	
			Preservative	50% Glycerin	Preservative Volume Vial 1		Preservative Volume Vial 2	
			Diluent	PNS	Diluent Volume Vial 1		Diluent Volume Vial 2	

Create 1b version using HSA, again make two 5 ml SCIT treatment vials.

					Vial 1 = endpoints #1 thru #4		Vial 2 = endpoints #5 thru #6	
Control/Ag	SPT mm	MQT Dilution	ID mm	EP	Ag Dilution	Ag Volume	Ag Dilution	Ag Volume
PNS	0							
Glycerin	0							
Histamine	5							
Bermuda	4	5	8	5				
Timothy	9	X	X	6				
Ragweed	2	2	5	Neg				
Pigweed	4	5	5	4				
Marsh Elder	2	2	5	Neg				
Oak	3	5	6	4				
Elm	2	2	7	3				
Mt. Cedar	2	2	5	Neg				
Alternaria	4	5	5	4				
Cladosporium	2	2	8	3				
Helminthosporium	2	2	7	3				
D. farinae	5	5	7	5				
Cat	4	5	8	5				
*Make 5cc vials using HSA *Determine Ag dilution to use -Go “2 to the right” *Calculate total antigen volume *Write in diluent if appropriate *Calculate HAS (diluent) volume			Total Ag Volume Vial 1				Total Ag Volume Vial 2	
			Preservative	HSA	Preservative Volume Vial 1		Preservative Volume Vial 2	
			Diluent		Diluent Volume Vial 1		Diluent Volume Vial 2	

Worksheet #2 - In Vitro

ANTIGEN	sIgE Class	RAST -1		Endpoint	dilution to use	volume to use
Bermuda	2					
Timothy	4					
Ragweed	6					
Pigweed	3					
Marsh Elder	3					
Oak	2					
Elm	2					
Mt. Cedar	2					
Alternaria	1					
Cladosporium	3					
Helminthosporium	3					
D. farinae	5					
Cat	4					
Preservative type to add Diluent type to add					Total antigen volume	
					50% glycerin	Preservative volume to add
					PNS	Diluent volume to add
						Total volume
						5.0 cc

Worksheet #3 - MQT

ANTIGEN	SPT	ID Test	ID Result	Endpoint	dilution to use	volume to use
D. pteronyssinus	2 mm	#2				
D. farinae	5 mm	#5				
Cat	10 mm	None	None			
Preservative type to add Diluent type to add					Total antigen volume	
					NA	Preservative volume to add
					HSA	Diluent volume to add
						Total volume



Worksheet 4: SLIT Vial Creation Using SPT

Remember that SLIT only needs qualitative testing, does not require Endpoints

First determine which Antigens show positive sensitivity on Skin Prick Testing (SPT):

Antigen/Control	SPT (mm)	Positive Test?
Glycerin	2	N/A
Histamine	7	N/A
Bermuda	5	
Timothy	7	
Birch	9	
Marsh Elder	3	
Oak	8	
Elm	9	
Mt. Cedar	4	
Bahia	5	
Cladosporium	4	
Helminthosporium	2	
D. Farinae	9	
Cat	9	

Next, evaluate patient's history and pick the most relevant positive Antigens to include in the SLIT vial. This patient has a cat at home and has both indoors and outdoors allergic rhinitis worst in spring and summer. Patient travels a lot and cannot do weekly shots. No history of asthma and no B blocker use. Now create the maintenance vial (vial#2) and escalation vial (vial #1) for SLIT. Remember that the escalation vial is created from the maintenance vial.

			Maintenance Vial (Vial 2)		Escalation Vial (Vial 1)
Antigen	SPT (mm)	Positive Test?	Ag Dilution	Ag Volume (ml or cc)	Volume taken from Maintenance Vial
Bermuda	5	Y			
Timothy	7	Y			
Birch	9	Y			
Marsh Elder	3	N			
Oak	8	Y			
Elm	9	Y			
Mt. Cedar	4	N			
Bahia	5	Y			
Cladosporium	4	N			
Helminthosporium	2	N			
D. Farinae	9	Y			
Cat	9	Y			
Ag volume (ml)					N/A
Diluent/Preservative is				Volume (ml)	
				Total volume (ml)	