June 30, 2005

William G. Kelly

Re: Talc and Ovarian Carcinogenesis

Dear Bill:

Per your request, I have undertaken and completed a systematic discovery of medical scientific experts on the epithelial ovarian carcinogenesis. The objectives of this task were a) to identify such individuals from several disciplines who could be responsible for reviewing the body of scientific literature on talc and ovarian carcinogenesis in order to arrive at an independent and objective conclusion as to whether talc is a likely or definite ovarian carcinogen and b) to form a "priority list" within each discipline based on level of expertise and reputation, research interest and likelihood of objectivity.

Experts were sought in the disciplines of Epidemiology (preferably with background in Biostatistics), Molecular & Cell Biology of Carcinogenesis (emphasizing in vivo models), Pathology, Gynecologic Oncology and General Gynecology. Since all gynecologic oncologists are also board certified in general gynecology and consolidation of manpower is an important consideration, general gynecologists without expertise in gynecologic oncology or the other relevant fields, were not sought.

In addition to personal knowledge of such experts, The National Center for Biotechnology Information (<a href="http://www.ncbi.nlm.nih.gov/">http://www.ncbi.nlm.nih.gov/</a>) was used to perform a comprehensive search. Complete and selected bibliographies were then reviewed to identify individuals with appropriate expertise. Some individuals were also identified from the Committee on Cancer Prevention and Control of the Gynecologic Oncology Group (<a href="http://www.gog.org/">http://www.gog.org/</a>) as this important national cooperative group committee has had particular interest in mechanisms of ovarian carcinogenesis and primary prevention. Of the more than two hundred individuals initially identified and screened, a final list of 21 was generated. Some of these thought investigators/thought leaders have expertise in more than one discipline. I have provided tables for each discipline with a rank order and rationale for the rank order below.



### Epidemiology

Rank	Last	First	Degree	Title Senior Investigator, Chief -	Institution	URL
1	Brinton	Louise	PhD	Hormonal and Reproductive Epidemiology Branch Unit Chief, Department of	NCI	http://dceg.cancer.gov/people/BrintonLouise.htm
				Obstetrics, Gynecology &	Brigham &	
2	Cramer	Daniel	MD MD.	Reproductive Biology	Women's Hospital	http://www.brighamandwomens.org/WRHRpros
3	Risch	Harvey	PhD	Professor, Epidemiology	Yale University Harvard School of	\.\PDF\Personaf\Risch H Biblio.pdf
4	Harlow	Bernard	PhD	Professor, Epidemiology	Public Health	Bernard Harlow, Associate Professor in the Depa
			MD,	Professor of Medicine,	Harvard Medical	
5	Colditz	Graham	PhD	Epidemiologist	School	Channing Laboratory - Graham A. Colditz, MD,
				Associate Professor of	Harvard Medical	
6	Hankinson	Susan	ScD	Medicine, Epidemiologist	School American Cancer	Channing Laboratory - Susan E, Hankinson, ScD
7	Rodriguez	Carmen		Senior Epidemiologist	Society	
			MD,	Senior Member, Population	Fox Chase Cancer	
8	Daly	Mary	PhD	Science Division	Center	Fox Chase Cancer Center: Mary B. Daly, M.D., J

Rationale for Rank Order (first three candidates):

Louise Brinton is a highly regarded epidemiologist with an important administrative position within NCI, who is highly prolific in epidemiology in general and in the epidemiology of ovarian cancer in particular. She has not participated in any studies related to talc exposure that I can tell, so would likely remain unbiased in this regard. She is also a member of the GOG CPC.

Daniel Cramer is an epidemiologist who I believe received his medical subspecialty training in Obstetrics & Gynecology. He is a highly regarded ovarian cancer epidemiologist with a strong publication list in this area. He was a key investigator in the prospective cohort study of tale exposure and ovarian cancer development. This is the most scientifically reputable epidemiologic study in this area. A key factor in the selection of Dr. Cramer to the short list is his combined experience in gynecology and ovarian cancer epidemiology.

Harvey Risch is an MD, PhD, Professor of Epidemiology at Yale and a world renowned ovarian cancer epidemiologist. Based on his selected publication list, he is also likely to remain unbiased. I have had personal contact with Dr. Risch.

# Molecular & Cell Biology of Carcinogenesis

Rank	Last	First	Degree	Title Professor of Obstetrics &	Institution	City	State	URL
1	Auersperg	Nelly	MD, PhD	Gynecology	University of British Columbia	Vancouver		Interdisciplinary)
2	Godwin	Andrew	PhD	Member, Medical Science Division	Fox Chase Cancer Center	Philadelphia	PA	Fox Chase Canc
3	Hamilton	Thomas	PhD	Senior Member, Medical Division	Fox Chase Cancer Center	Philadelphia	PA	Fox Chase Canc
4	Bell	Debra	MD	Associate Professor of Pathology	Harvard Medical School M.D. Anderson Cancer	Boston	MA	Pathology Servic
5	Bast	Robert	MD	Professor Senior Member, Population Science	Center	Houston	TX	Robert C. Bast, .
6	Testa	Joseph	PhD	Division Chairman, Department of Molecular	Fox Chase Cancer Center M.D. Anderson Cancer	Philadelphia	PA	Fox Chase Canc
7	Mills	Gordon	MD, PhD	Therapeutics	Center	Houston	TX	M. D. Anderson

Rationale for Rank Order (first three candidates):

Nelly Auersperg is one of the most accomplished and well renowned reproductive scientists in the area of ovarian carcinogenesis and the biology of the surface ovarian epithelium. She is number one, hands down. She is also trained in Obstetrics & Gynecology so functionally covers two categories.

Andrew Godwin is the most accomplished current basic scientist in the area of ovarian carcinogenesis. He is a close colleague and disciple of Thomas Hamilton. His work is truly cutting edge.

Thomas Hamilton is a pioneer in the biology of ovarian carcinogenesis and has experience in several in vivo model systems (similar to Dr. Godwin). He is also one of the only scientist to publish on the basic scientific relationship between talc and ovarian cancer.

### Pathology

Rank		Last	First	Degree	Title	Institution	City	State	URL
					Professor of Pathology &				
	1	Kurman	Robert	MD	Obstetrics/Gynecology	Johns Hopkins	Baltimore	MD	Gynecologic Pathology
	2	Bell	Debra	MD	Associate Professor of Pathology Professor of Pathology & Internal	Harvard Medical School	Boston	MA	Pathology Service at MGF
	3	Cho	Kathleen	MD	Medicine Assistant Professor, Molecular	University of Michigan Massachusetts General	Ann Arbor	MI	University of Michigan - Do
	4	Orsulic	Sandra	PhD	Pathology	Hospital	Boston	MA	Pathology Service at MGF

#### Rationale for Rank Order:

Robert Kurman is a double boarded pathologists and obstetrician-gynecologist who is an icon of ovarian cancer pathology. His CV speaks for itself.

Debra Bell is a molecular pathologist with expertise on carcinogenesis of epithelial ovarian tumors. She is Associate Professor in the Department of Pathology at Harvard Medical School and trained under Dr. Scully, the father of ovarian pathology.

Dr. Cho is a Professor of both Pathology and Internal Medicine with a large body of experience in ovarian cancer pathology. She has several basic scientific interests including the molecular classification of ovarian carcinomas. I know Dr. Cho personally and she is not only well respected, but well spoken.

Dr. Orsulic is also a molecular pathologist from a good institution, with a more limited C.V. than Dr. Bell, but with important expertise in mouse models of ovarian carcinogenesis.

## Gynecologic Oncology

Rank		Last	First	Degree	Title	Institution	City	State	URL
	1	Berchuck	Andrew	MD	Professor of Obstetrics & Gynecology Associate Professor.	Duke University	Durham	NC	Duke University IGSP Site Ar
	2	Brewer	Molly	MD, DVM, MS	Obstetrics & Gynecology, Gynecologic Oncology	University of Arizona	Tuscon	AZ	University of Arizona, Departme
	3	Burger	Robert	MD	Associate Professor, Obstetrics & Gynecology, Gynecologic Oncology	University of California, Irvine	Orange	CA	ROBERT ALLEN BURGER, MI

Any of these would be excellent, though I am obviously biased in including myself in this list.

Andrew Berchuck is probably the most highly regarded combination of gynecologic oncologist and basic ovarian cancer researcher. Although most of his work has dealt with ovarian carcinogenesis as it relates to molecular genetics, he is a key thought leader in the general subject of epithelial ovarian cancer pathogenesis. He is also president-elect for the Society of Gynecologic Oncologists and a personal colleague. He is not only brilliant and analytical, but extremely classy and well spoken individual.

Molly Brewer is a gynecologic oncologist at U of A with a focused research interest in precursors of ovarian carcinoma development. She is highly involved in primary prevention studies.

Robert Burger is a gynecologic oncologist with a research program dedicated to ovarian cancer pathogenesis and therapeutics. He is a member of several important committees in the Gynecologic Oncology Group, including the Ovarian Cancer Committee, the Committee on Experimental Medicine, and the Developmental Therapeutics Committee. He has an academic interest in ovarian carcinogenesis and prevention, including multiple invited lectures on this subject and organizing and directing a symposium on this subject at his local NCI comprehensive cancer center.