



## Newsletter

*Frank Kiesner, Founder and CEO of OvaGene Oncology, Inc.  
answers frequently asked questions about Kay's Array*

### 1. Who is OvaGene Oncology?

OvaGene Oncology, Inc. is a new company in Irvine, California dedicated to innovation, to improving patient care, and to making the most efficient use of healthcare dollars. We work with advanced gene-based technologies to individualize the treatment of cervical, endometrial, and ovarian cancers. OvaGene is led by a team of M.D.'s, Ph.D.'s and other healthcare professionals, many of whom have experienced gynecologic cancer within their own families. By working with cancer centers around the world, OvaGene is committed to applying new genetic discoveries to the personalization of diagnosis and treatment of gynecologic cancers. Our mission is to bring new diagnostic discoveries to the bedside.

### 2. What is the Kay's Array Assay?

Kay's Array is one of the tests offered by OvaGene. It was named in memory of a relative of one of our founders, Kay, who was diagnosed with ovarian cancer in 2006. During her four year treatment, Kay's family requested that she be tested to see if any of a new class of drugs called targeted drugs might help her. At that time, these targeted drugs were approved for regular use in cancers like breast, colon, lung, and gastric cancers, but they were not used in gynecologic cancers. Kay was tested at a world-renowned cancer center to see if her unique tumor contained the targets that these drugs are designed to attack. OvaGene Oncology was founded, in part, to make this information accessible to all ladies fighting gynecologic cancer.

### 3. How does KAY'S ARRAY help cancer patients?

It allows cancer treating physicians to consider targeted drugs as possible treatment options. It allows these physicians to look beyond the normal options for their patients.

### 4. Is KAY'S ARRAY right for you?

Only your doctor can determine if the KAY'S ARRAY is right for you. Please ask your physician about KAY'S ARRAY.

### 5. What information is on the KAY'S ARRAY report?

It reports to your physician the presence or absence of drug targets in your tumor.

### 6. How much does KAYS ARRAY cost?

OvaGene bills insurance companies directly. Patients with insurance will only be responsible for co-payments and deductibles as required by their insurance. For patients without insurance, OvaGene Oncology will work directly with the patient to establish a payment plan that fits individual needs.

### 7. How do I get KAY'S ARRAY ordered for me?

Your physician must determine the need and necessity for this test. He or she is the only one who can request it to be performed. If needed, more ordering details can be found on our website [www.ovagene.com](http://www.ovagene.com) or your physician can call OvaGene's Client Services department at 1-800-748-8600.

### 8. How long does it take until I received my KAY'S ARRAY results?

Results for the KAY'S ARRAY Assay are available within 10 working days. Once the testing has been completed, a final Patient Report will be sent directly to your physician. Test results will be discussed at your next office appointment.

### 9. How do I get more information on KAY'S ARRAY or other OvaGene cancer tests?

More information is available by contacting OvaGene's Patient Relations Director, Kim Beaudette, at 949-271-8814 or you can email her at [kbeaudette@ovagene.com](mailto:kbeaudette@ovagene.com).

**"MOLECULAR INNOVATION FOR GYNECOLOGIC CANCERS"**

Patient Information	Specimen Information	Ordering Physician Information
<b>Patient Name:</b> Doe, Jan <b>Medical Record/Patient #:</b> 4455666677 <b>Gender:</b> Female <b>Date of Birth:</b> 08/10/1940 <b>Submitting Diagnosis:</b> Ovarian Cancer	<b>Specimen Site:</b> Ovary <b>Specimen ID#:</b> OVG-889900 <b>Date Collected:</b> 03/09/2012 <b>Date Ordered:</b> 03/15/2012 <b>Date Received:</b> 03/16/2012 <b>Date Reported:</b> 03/30/2012	<b>Ordering Physician:</b> Dr. Joe A. Smith <b>Additional Physician:</b> Dr. Steve Jones <b>Institution:</b> Community Hospital, Dept. of GYN <b>Location:</b> Fresno, CA, 90001 <b>Phone:</b> 1-800-976-8989 <b>Fax:</b> 1-800-675-7878

## Kay's Array™ EXPRESSION PROFILE REPORT

### Results Summary

SAMPLE

Patient's gene expression profile shows evidence of possible responses:		
Increased Response	Decreased Response	Average Response
Tamoxifen Aromatase Inhibitors Bevacizumab EGFR Inhibitors	Imatinib COX2 Inhibitors Pemetrexed Pemetrexed or Fluorouracil Trastuzumab or Lapatinib	Bortezomib Sorafenib Cixutumumab Sirolimus Cyclophosphamide

Therapeutic	Genes Analyzed	Expression Results	Interpretation	✓	Refs
<i>Tamoxifen</i>	17HDH	Low	Improved Response		1-4
	ER	High	Improved Response		17,18,44
<i>Imatinib</i>	ABL	Low	Decreased Response		5,40
	CKIT	Low	Decreased Response		5,40
	PDGFRA	In Range	Average Response		5,40
<i>Aromatase Inhibitors</i>	AROMATASE	High	Improved Response		6-9,34,35,39
<i>Bortezomib</i>	BCL2	In Range	Average Response		10,11,47
<i>Bevacizumab</i>	CD31	High	Improved Response		12-16
	VEGF	High	Improved Response		12-16
	VEGFR2	High	Improved Response		28-31
<i>Sorafenib</i>	BRAF	In Range	Average Response		42
<i>COX2 Inhibitors</i>	COX2	Low	Decreased Response		37
<i>Pemetrexed</i>	DHFR	Low	Decreased Response		33
	DPD	Low	Decreased Response		33
	GART	Low	Decreased Response		33
<i>Pemetrexed or Fluorouracil</i>	TS	Low	Decreased Response		32,33
<i>EGFR Inhibitors</i>	EGFR	High	Improved Response		38,45,46
<i>Trastuzumab or Lapatinib</i>	HER2	Low	Decreased Response		41,46
<i>Cixutumumab</i>	IGFR	In Range	Average Response		19-23
<i>Sirolimus</i>	MTOR	In Range	Average Response		26,27,43
<i>Cyclophosphamide</i>	MITOSIN	In Range	Average Response		24,25

NOTE: While the over-expression or lack of expression for a specific gene may be correlated to a specific clinical outcome, the opposite may not be supported by the current literature. Please refer to the literature for more specifics on response and how the expression of a specific gene may affect outcome.

This Assay was developed and its performance characteristics determined by OvaGene Oncology, Inc. OvaGene has established its accuracy and precision pursuant to the Clinical Laboratory Improvement Amendments of 1988 (CLIA-88). This Assay has not been cleared or approved by the U.S. Food and Drug Administration. The FDA has determined that such clearance or approval is not necessary. This laboratory is regulated under the Clinical Laboratory Improvement Amendments of 1988 (CLIA) as qualified to perform high complexity clinical testing. This Assay is used for clinical purposes and the results should be interpreted in reference to other laboratory and clinical findings.

Laboratory Director: Basel Kashlan, M.D.

CAP #: 7541687

CLIA #: 05D2027259