

ONCONOSTIC TEST REPORT
超微癌速測報告
(男性 健康 無腫瘤增殖風險 報告範本)

Patient:	Client/Hospital ID:
Age:	Treating Physician:
Sex: Male	Specimen ID: DX#
Order Received: 2022/ /	Sampling Date:
Lab Requisition #:	
Specimen Type: Touch Exosome DNA	
Date Reported:	
Clinical Indication:	

RESULTS:

ORGAN VULNERABILITY & RISK ASSESSMENT (臟器脆弱性及風險評估)

MALIGNANCY	ORGAN							
	LUNG 肺	MESOTHE LIOMA 間皮瘤	COLON 結腸	GASTRIC 胃	ESOPHAGUS 食道	BLADDER 膀胱	TESTES 睪丸	PROSTATE 前列腺
Aggressiveness* 侵略性	-	-	-	-	-	-	-	-
Distant** Metastasis 遠距轉移	-	-	-	-	-	-	-	-

MALIGNANCY	ORGAN							
	LIVER 肝	CHOLANG IOCARCIN OMA 膽道癌	PANCREAS AMPULLA 胰、壺腹	THYROID 甲狀腺	NET 神經內分泌	KIDNEY 腎	NSP 鼻咽癌	LYMPHOMA 淋巴瘤
Aggressiveness* 侵略性	-	-	-	-	-	-	-	-
Distant** Metastasis 遠距轉移	-	-	-	-	-	-	-	-

- *當特定臟器侵略性欄位為“±”時，該臟器目前已出現慢性炎症，“無增殖風險”。
- *當特定臟器侵略性欄位為“+”時，該臟器目前已出現癌變，“持續增殖風險” <30%。
- *當特定臟器侵略性欄位為“++”時，該臟器目前已出現癌變，“持續增殖風險” ≥30%。
- *當特定臟器侵略性欄位為“+++”時，該臟器目前已出現癌變，“持續增殖風險” ≥60%。
- **當特定臟器遠距轉移欄位為“+”時，該臟器目前已出現遠距轉移，“多發轉移風險” ≤ 60%。
- **當特定臟器遠距轉移欄位為“++”時，該臟器目前已出現遠距轉移，“多發轉移風險” >60%。

INTERPRETATION

健康， “無腫瘤增殖風險”

分子病理一期

NO RISK FOR MALIGNANT TUMOR GROWTH

無惡性腫瘤風險

分子病理五期 (Molecular Pathological Stage V)：癌變發展三期，惡性腫瘤高度風險

分子病理四期 (Molecular Pathological Stage IV)：癌變發展二期，惡性腫瘤高度風險

分子病理三期 (Molecular Pathological Stage III)：癌變發展一期，惡性腫瘤高度風險

分子病理二期 (Molecular Pathological Stage II)：亞健康，惡性腫瘤低度風險

分子病理一期 (Molecular Pathological Stage I)：健康，無風險

RECOMMENDATION

Regular checkup for all major cancers every 12 months.

建議每 12 個月作一次全面惡性腫瘤檢測

PRINCIPLE

OncoNostic Test is a differential DNA energetics assay for the qualitative detection of distinct energetic variants of cancer-associated alleles in circulation exosome derived from patient's finger touch sample. The test panel covers critical regulatory genes associated with tumor initiation, proliferation, migration, invasion, apoptosis, metastasis and immune evasion. Test results are compiled into a composite index to underscore the molecular pathological stages common to cancer staging.

OncoNostic Test is a real-time cancer risk assay, encompassing the majority of cancer indications such as unlimited multiplication, escaping from growth suppressors, promoting invasion and metastasis, resisting apoptosis, evading immune destruction, genome instability and tumor-enhanced inflammation.

As a first-line cancer screening test, OncoNostic Test checks organ-specific vulnerability for all 18 types of cancer. The Test has been extensively validated using clinical samples for its diagnostic sensitivity and specificity, which is tabulated below.

PERFORMANCE CHARACTERISTICS

Following study is based on 1780 validated samples for patients between 25 to 75 years old.

OncoNostic Test		VALIDED SAMPLES		TOTAL
		POSITIVE	NEGATIVE	
OncoScore	< 65	866	4	870
	≥ 65	12	898	910
TOTAL		878	902	1780

Sensitivity: 98.6%

靈敏度

Specificity: 99.5%

特異性

PPV: 99.5%

陽性預估值

NPV: 98.7%

陰性預估值

COMMENTS

OncoNostic Test is a pan-cancer test and can be used as a first-line screening for all known types of cancer. The specificity of the test is 99.5% based on an in-house clinical study with validated cancer patients. Under optimum condition, the NPV and PPV of OncoNostic Test are 98.7% and 99.5%, respectively.

*Onconostic Test should be used in conjunction with additional clinical diagnostic procedures for any medical decisions. Like other laboratory tests, OncoNostic Test must be ordered by an authorized healthcare provider.

**Deviations from the "Sample Collection Procedure" recommended for the Onconostic Test may compromise its overall accuracy.

Sign: **BING LING, MD**

Date: **2022/11/30**

REFERENCES

1. Wujun Chen, Shuai Wang, Dongming Xing, New Horizons for the Roles and Association of APE1/Ref-1 and ABCA1 in Atherosclerosis. Received: 19 July 2021 Accepted: 25 September 2021 Published: 14 October 2021; Journal of Inflammation Research 2021:14
2. Thais Teixeira Oliveira, Leonam Gomes Coutinho, Laysa Ohana Alves de Oliveira, Ana Rafaela de Souza Timoteo, Guilherme Cavalcanti Farias and Lucymara Fassarella Agnez-Lima, APE1/Ref-1 Role in Inflammation and Immune Response. Received: 11 October 2021 Accepted: 07 February 2022 Published: 28 February 2022; Frontiers in Immunology February 2022 | Volume 13 | Article 793096
3. Giovanna Mangiapane, Isabella Parolini, Kristel Conte, Matilde Clarissa Malfatti, Jessica Corsi Massimo Sanchez, Agostina Pietrantonio, Vito G. D'Agostino, and Gianluca Tell, enzymatically active apurinic/apyrimidinic endodeoxyribonuclease 1 is released by mammalian cells through exosomes. Received for publication, October 16, 2020, and in revised form, March 11, 2021 Published, Papers in Press, March 19, 2021,
4. Sunga Choi, Yu-Ran Lee, Ki-Mo Kim, Euna Choi and Byeong-Hwa Jeon, Dual Function of Secreted APE1/Ref-1 in TNBC Tumorigenesis: An Apoptotic Initiator and a Regulator of Chronic Inflammatory Signaling. Received: 8 July 2022, accepted: 9 August 2022, Published: 12 August 2022,
5. Ielizaveta Gorodetska, Iryna Kozeretska, Anna Dubrovskaya, BRCA Genes: The Role in Genome Stability, Cancer Stemness and Therapy Resistance. Received: 2018.10.04; Accepted: 2019.02.20; Published: 2019.05.14
6. Xuehui Wang, Minghui Chen, and Lin Fang, hsa_circ_0068631 promotes breast cancer progression through c-Myc by binding to EIF4A3. Received 2 March 2021; accepted 2 July 2021;
7. Zheng Chen, Yingjie Guo, Da Zhao, Quan Zou, Fusheng Yu, Lijun Zhang and Lei Xu, Comprehensive Analysis Revealed that CDKN2A is a Biomarker for Immune Infiltrates in Multiple Cancers. Received: 03 November 2021, accepted: 06 December 2021, Published: 23 December 2021
8. Li Su, Hanwei Wang, Jingwei Miao & Ying Liang, Clinicopathological Significance and Potential Drug Target of CDKN2A/p16 in Endometrial Carcinoma. received: 30 March 2015, accepted: 30 June 2015, Published: 18 August 2015

9. Francesca Ida Montalto and Francesca De Amicis, Cyclin D1 in Cancer: A Molecular Connection for Cell Cycle Control, Adhesion and Invasion in Tumor and Stroma. Received: 1 November 2020; Accepted: 6 December 2020; Published: 9 December 2020
10. Koji Takada, Shinichiro Kashiwagi , Yuka Asano, Wataru Goto, Rika Kouhashi, Akimichi Yabumoto, Sae Ishihara, Tamami Morisaki, Masatsune Shibutani, Hiroaki Tanaka, Kosei Hirakawa and Masaichi Ohira, Prediction of distant metastatic recurrence by tumor-infiltrating lymphocytes in hormone receptor-positive breast cancer. Received: 15 February 2021 Accepted: 24 May 2021 Published online 29 May 2021
11. Yong Xia, Yan Liu, Chao Yang, Diane M. Simeone, Tung-Tien Sun, David J. DeGraff, Moon-shong Tang, Yingkai Zhang & Xue-Ru Wu, Dominant role of CDKN2B/p15INK4B of 9p21.3 tumor suppressor hub in inhibition of cell-cycle and glycolysis. Received: 18 February 2020; Accepted: 11 March 2021; Published online 06 April 2021
12. Ellis Tibbs and Xuefang Cao, Emerging Canonical and Non-Canonical Roles of Granzyme B in Health and Disease. Received: 11 February 2022; Accepted: 8 March 2022; Published: 10 March 2022
13. Morgan S. Schrock, Jenna R. Karras, Matthew J. Guggenbiller, Teresa Druck, Bahadir Batar, Kay Huebner, Fhit and Wwox loss-associated genome instability: genome caretaker one-two punch. Published in final edited form as: Adv Biol Regul. 2017 January; 63: 167–176. doi: 10.1016/j.jbior.2016.09.008.
14. Satoshi Miuma, Joshua C. Saldivar, Jenna R. Karras, Catherine E. Waters, Carolyn A. Paisie, Yao Wang, Victor Jin, Jin Sun, Teresa Druck, Jie Zhang, Kay Huebner, Fhit Deficiency-Induced Global Genome Instability Promotes Mutation and Clonal Expansion. Received July 2, 2013; Accepted October 7, 2013; Published November 14, 2013
15. Jenna R. Karras Morgan S. Schrock Bahadir Batar Kay Huebner, Fragile Genes That Are Frequently Altered in Cancer: Players Not Passengers. Cytogenet Genome Res 2016; 150:208–216 Published online: February 16, 2017
16. Min A Kim, Hyuk-Joon Lee, Han-Kwang Yang, Yung-Jue Bang & Woo Ho Kim, Heterogeneous amplification of ERBB2 in primary lesions is responsible for the discordant ERBB2 status of primary and metastatic lesions in gastric carcinoma. Histopathology 2011, 59, 822–831. DOI: 10.1111/j.1365-2559.2011.04012.x Date of submission 12 June 2010; Accepted for publication 15 December 2010
17. Xiaobing Wu, Maoni Guo, Jian Cui, Haoyang Cai³ and San Ming Wang, Heterozygotic Brca1 mutation initiates mouse genome instability at embryonic stage. Oncogenesis (2022) 11:41; Received: 20 December 2021 Revised: 7 July 2022 Accepted: 11 July 2022; Published online: 22 July 2022
18. Meghna M. Baruah a, Neeti Sharma, miR-221 regulates proliferation, invasion, apoptosis and progression of prostate cancer cells by modulating E-cadherin/Wnt/ β catenin axis. Received 13 April 2021; Received in revised form 30 June 2021; Accepted 30 June 2021; Available online 1 July 2021
19. Yuan-Ke Liang, Hao-Yu Lin, Xiao-Wei Dou, Min Chen, Xiao-Long Wei, Yong-Qu Zhang, Yang Wu, Chun-Fa Chen, Jing-Wen Bai, Ying-Sheng Xiao, Yu-Zhu Qi, Frank A. E. Krutz and Guo-Jun Zhang, MiR-221/222 promote epithelial-mesenchymal transition by targeting Notch3 in breast cancer cell lines. Received: 27 January 2018 Revised: 26 June 2018 Accepted: 29 June 2018; Published online: 06 August 2018
20. Weinan Wang, Rui Zou, Ye Qiu, Jishuang Liu, Yu Xin, Tianzhu He, and Zhidong Qiu, Interaction Networks Converging on Immunosuppressive Roles of Granzyme B: Special Niches Within the Tumor Microenvironment. Received: 21 February 2021; Accepted: 15 March 2021; Published: 01 April 2021
21. Xuehui Wang, Minghui Chen, and Lin Fang, hsa_circ_0068631 promotes breast cancer progression through c-Myc by binding to EIF4A3. Received 2 March 2021; accepted 2 July 2021; Molecular Therapy: Nucleic Acids Vol. 26 December 2021
22. Guergana Tchakarskaa and Brigitte Sola, The double dealing of cyclin D1. Received 7 October 2019; Revised 7 November 2019; Accepted 18 November 2019; CELL CYCLE 2020, VOL. 19, NO. 2, 163–178