ONCONOSTICS ASSAY
MOLECULAR MALIGNANCY ANALYSIS
超微全癌精測報告 (癌友適用範本)

Patient:	Hospital:
Age: 54 歲	Treating Physician:
Sex: Female	Specimen ID:
Order Received: 2023/12/	Sampling Date: 2023/12/

Lab Requisition #:
Specimen Type: Exosome DNA
Date Reported:
Clinical Indication: Breast CA

RESULTS

GENOME HOMEOSTASIS ANALYSIS(基因組穩態分析)

BIOMARKERS	SIGNIFICANCE*	G-SCORE	T-SCORE	ONCOSCORE	G-SCORE RANGE	T-SCORE RANGE
P53 **BRCA**	Genomic Stability 基因組穩定性	14	-3	11	*0~20*	*0~-6*
CYCLIN D1 **CDKN2A (p16)**	Tumor Initiation 腫瘤生成	14	-3	11	*0~20*	*0~-6*
CDKN2B (p15) **C-MYC**	Tumor Malignancy, Proliferation and Invasion 腫瘤惡性增殖	14	0	14	*0~20*	*0~-6*
APE1/Ref-1	Cellular and Tissue Homeostasis 細胞組織衡態	7	0	7	*0~10*	*0~-3*
CST E/M **miR-221**	EMT (epithelial-mesenchymal transition) and epithelial cell infiltration 上皮間質轉化和上皮細胞浸潤	14	0	14	*0~20*	*0~-6*
erbB2	Cancer Metastasis Anti-apoptosis 臟器轉移和反凋零	7	0	7	*0~10*	*0~-3*
GRANZYME B	TME Immunosuppression 腫瘤微環境免疫抑制	7	0	7	*0~10*	*0~-3*
TOTAL		77	-6	71	*0~110*	*0~-33*
GENOMIC STRESS		低度基因組壓力 惡性腫瘤低度風險				

(ONCOSCORE 評比範圍： 0 至 110 分）
0 分 至 24 分: 過度基因組壓力， 惡性腫瘤極度風險
25 分 至 49 分: 高度基因組壓力，惡性腫瘤高度風險
50 分 至 64 分: 中度基因組壓力，惡性腫瘤中度風險
65 分 至 79 分: 低度基因組壓力，惡性腫瘤低度風險
80 分 至 110 分: 無基因組壓力，無惡性腫瘤風險

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

MALIGNANCY	ORGAN								
	LUNG 肺	MESOTHELIOMA 間皮瘤	COLON 結腸	GASTRIC 胃	ESOPHAGUS 食道	BLADDER 膀胱	LYMPHOMA 淋巴瘤	BREAST 乳房	CERVIX 子宮頸
Aggressiveness* 侵略性	-	-	-	(±)	-	-	-	±	-
Distant Metastasis 遠距轉移**	-	-	-	-	-	-	-	-	-

MALIGNANCY	ORGAN								
	LIVER 肝	CHOLANGIOCARCINOMA 膽道癌	PANCREAS AMPULLA 胰、壺腹	THYROID 甲狀腺	NEUROENDOCRINE 神經內分泌	KIDNEY 腎	NSP 鼻咽癌	OVARY 卵巢	UTERUS 子宮
Aggressiveness* 侵略性	-	-	-	-	-	(±)	-	(±)	-
Distant Metastasis 遠距轉移**	-	-	-	-	-	-	-	-	-

*當特定臟器侵略性欄位為”(±)” 時，該臟器目前已呈現慢性炎症.
*當特定臟器侵略性欄位為”±” 時，該臟器目前已呈現慢性增殖，“癌變風險” <30%.
*當特定臟器侵略性欄位為”+” 時，該臟器目前已呈現快速增殖，“癌變風險” ≥30%.
*當特定臟器侵略性欄位為”++” 時，該臟器目前已呈現惡性增殖，“癌變風險” ≥60%.
*當特定臟器侵略性欄位為”+++” 時，該臟器目前已呈現持續惡性增殖，“癌變風險” ≥90%.
**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%.

BIOAGE 生理年齡

AGING	+ 2
CALENDAR AGE = 54 YEARS OLD	IGF1 BIOAGE* = 56 ±1 YEARS OLD

*IGF1 senescence denotes an accelerated aging process induced by chronic stress and various inflammation stimuli. Cellular senescence can result in irreversible tissue damage and organ dysfunction.

DEPRESSION INDEX 抑鬱指數

BIOMARKER	PERIPHERAL EXPRESSION LEVEL
SORL1	3.5

Sortilin is closely associated with the pathogenesis of MDD, and its expression level correlates with the severity of exacerbation in mood disorders. Mood disorders can lead to irreversible vascular and brain damage.
Sortilin 與 MDD 的發病機制密切相關，其表達水準與心境障礙加重的嚴重程度相關。情緒障礙可導致不可逆的血管和腦損傷。
No or Mild Depression: Level 0 and 1 (無抑鬱或輕度抑鬱：0 級和 1 級)
Moderate Depression: Level 2, 3 and 4 (中度抑鬱：2、3 和 4 級)
Major Depression: Level 5, 6 and 7 (重度抑鬱症：5、6 和 7 級)

ORGAN VULNERABILITY

BREAST IS CURRENTLY THE MOST VULNERABLE ORGAN
AT RISK OF LOW-GRADE TUMOR GROWTH
“乳房” 是目前最脆弱的器官，有低度惡性腫瘤生長風險

INTERPRETATION

MOLECULAR ONCOLOGY STAGE II
LOW RISK FOR SYSTEMIC MALIGNANCY
分子病理二期 : 全身性惡性腫瘤低風險

分子病理五期 (Molecular Pathological Stage V)：癌變發展三期，惡性腫瘤後期風險
分子病理四期 (Molecular Pathological Stage IV)：癌變發展二期，惡性腫瘤中期風險
分子病理三期 (Molecular Pathological Stage III)：癌變發展一期，惡性腫瘤初期風險
分子病理二期 (Molecular Pathological Stage II)：亞健康，惰性腫瘤風險
分子病理一期 (Molecular Pathological Stage I)：健康，無風險

RECOMMENDATION

MOLECULAR ONCOLOGY TEST FOR EVERY 6 MONTHS

建議每 6 個月作一次全面惡性腫瘤檢測

PRINCIPLE

OncoNostics Assay is a pan-cancer risk analysis for wide-ranging selected organs. The testing panel covers a spectrum of biomarkers related to genome stability, tumor initiation, proliferation, migration, invasion, apoptosis, EMT, metastasis and immune evasion. Test results are presented as a composite index to underscore the critical molecular stages associated with cancer development.
OncoNostics 檢測是針對廣泛選定器官的泛癌症風險分析。該測試涵蓋了與基因組穩定性、腫瘤起始、增殖、遷移、侵襲、細胞凋亡、上皮間質轉化、轉移和免疫逃避相關的一系列生物標誌物。測試結果以綜合指數的形式呈現，以強調與癌症發展相關的關鍵分子階段。

The assay analyzes the differential DNA energetics using exosome DNA derived from finger touch samples and has been cross checked for its real-time clinical performance with validated clinical samples as shown in the table below.
該測定使用源自手指觸摸樣本的外泌體 DNA 分析差異 DNA 能量學，並已與經過驗證的臨床樣本交叉檢查其實時臨床性能，如下表所示。

PERFORMANCE CHARACTERISTICS

Clinical performance is based on a validated study with patients aged between 25 to 75 years old.

OncoNostics Assay		VALIDATED SAMPLES		TOTAL
		POSITIVE	NEGATIVE	
OncoScore	< 65	866	4	870
	≥ 65	12	898	910
TOTAL		878	902	1780

Sensitivity: 98.6%	Specificity: 99.5%	PPV: 99.5%	NPV: 98.7%
靈敏度	特異性	陽性預估值	陰性預估值

COMMENTS

OncoNostics Assay is a pan-cancer test and can be used as a first-line screening for at least 18 types of cancer. The specificity of the test is 99.5% based on an in-house clinical study with validated cancer patients. Under optimal condition, the NPV and PPV of OncoNostics Assay are 98.7% and 99.5%, respectively.
OncoNostics 檢測是一種泛癌症測試，可用作至少 18 種癌症的一線篩查。根據對經過驗證的癌症患者的內部臨床研究，該測試的特異性為 99.5%。 在最佳條件下，腫瘤檢測的 NPV 和 PPV 分別為 98.7%和 99.5%。

*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.
* OncoNostic Test應與其他臨床診斷程序結合使用，以做出任何醫療決定。如同其他測試，OncoNostic Test 須由授權的醫療保健院所建議使用。

**Deviations from the "Sample Collection Procedure" recommended for the Onconostic Test may compromise its overall accuracy.
**偏離 Onconostic Test 檢測所規範的"採樣操作步驟"可能會影響其整體準確性。

Sign: ***BING LING, MD*** Date: 2024/ /

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