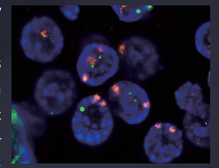
Molecular Diagnostics

- A new horizon in pathology that translates scientific advancement in medicine into clinical diagnostic service, through the application of cutting edge technologies in the field of molecular biology.
- Direct application to laboratory diagnosis of clinical disorders in the field of clinical oncology, infectious diseases and inherited diseases.
- Improved methods for diagnosis and monitoring of disease.
- Precise diagnosis directs specific and suitable treatment, tailored to personalized medical indication.

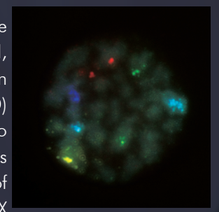
The Molecular Pathology Division

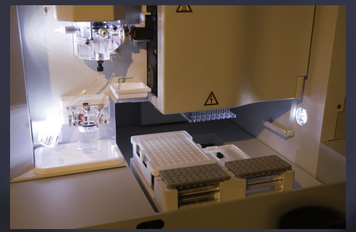
Hong Kong Sanatorium & Hospital is committed to providing the best quality and comprehensive medical and health care services to the general population. The Molecular Pathology Division is equipped with the full range of sophisticated instrumentation and utilizes state-of-the-art technology to provide high quality molecular diagnostic services for day to day patient management.

The division is staffed by highly qualified and well trained scientists and technologists. Our services cover different specialties including infectious diseases, clinical oncology and genetic disorders. We provide quantitative measurement of viral load and gene expression by real-time quantitative PCR. Gene mutation analysis is performed by high throughput automatic genetic analyzer. Tumour gene amplification is detected by fluorescence in situ hybridization.



In collaboration with the IVF center of the hospital, we provide preimplantation genetic diagnosis (PGD) to support in-vitro fertilization program. Embryo is examined for the number of chromosomes 13, 18, 21, X and Y before implantation in order to improve the successful rate and outcomes of pregnancy. This allows the exclusion of embryo with chromosome aneuploidy to be implanted.





Molecular Diagnostic Services

Infectious Diseases

CMV PCR	Rapid diagnosis and quantitative monitoring of infection.
EBV PCR	Screening for NPC and treatment monitoring.
H5N1 PCR	Rapid screening and diagnosis of H5N1 infection.
HBV PCR	Quantitative monitoring of infection and treatment effectiveness.
YMDD	Mutation analysis for treatment selection.
HCV PCR	Disease diagnosis and treatment monitoring. Genotype determination for treatment selection.
HPV PCR	Screening for high-risk HPV. Screening & Genotyping of HPV for cervical cancer screening & vaccination purposes.

Clinical Oncology

Leukemia PCR & mutation analysis	Disease diagnosis (CML, ALL, AML & APL), monitoring and prognostication. Selection of targeted treatment.
EGFR Mutation Analysis	Treatment with molecular targeted therapy.
EGFR/HER2 Gene Amplification	Selection of targeted therapy.
BRCA1 & BRCA2 Mutation analysis	Familial screening for hereditary breast and ovarian cancer.
Microsatellite analysis	Screening for hereditary colorectal cancer.
DNA MLH1 & MSH2 Mutation Analysis	Family screening of hereditary colorectal cancer.
CDH1 Mutation Analysis	Screening for familial case of gastric cancer.
C-KIT & PDGFRA Mutation Analysis	Therapy selection in gastrointestinal stromal tumor.

Molecular Pathology Division

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Service Hours
Monday to Friday: 9:00 am-6:00 pm
Saturdays: 8:00 am-12:00 pm
(Closed on Sundays and Public Holidays)
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養和醫院
HONG KONG SANATORIUM & HOSPITAL

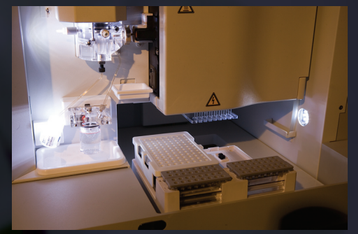
MOLECULAR DIAGNOSTICS

The New Frontier of Laboratory Medicine

Infectious Diseases

Clinical Oncology

Genetic Disorders



分子病理部

香港跑馬地山村道二號
養和醫院李樹芬院一樓
辦公時間
星期一至星期五：　上午八時至下午六時
星期六：　上午八時至中午十二時
（星期日及公眾假期休息）
如有查詢，歡迎聯絡我們
電話：2835 8790
傳真：2835 8799
電郵：lab@hksh.com

http://www.hksh.com

分子診斷學

- 利用分子生物學的嶄新技術，把最新的醫學科學研究應用於臨床診斷服務，開創病理學的新里程
- 分子診斷之化驗室結果可作為臨床腫瘤科、傳染性和遺傳性疾病之直接臨床診斷用途
- 分子診斷有助改善診斷及監控疾病之方法
- 分子診斷令診斷更精確，治療方案更能切合個別情況

分子病理部

本院一向致力提供優質而全面的醫療護理服務。分子病理部具備一系列精密的儀器設備，並採用先進技術，為醫生和病人提供優質的分子診斷服務。

分子病理部擁有經驗豐富、專科培訓的科學家和技術員，服務範圍包括傳染病、臨床腫瘤學和遺傳病之診斷。採用實時定量聚合鏈反應技術 (PCR) 進行病毒量和基因表現的定量檢測，應用高效能自動遺傳分析儀進行基因突變分析，並運用熒光原位雜交進行腫瘤基因擴增的檢測。

分子病理部與本院體外受孕中心合作，提供胚胎植入前基因診斷服務，於植入前診斷胚胎中第13、18、21、X和Y染色體，避免植入染色體偏高或偏低的胚胎，以提高體外受孕的成功率和胎兒出生率。

分子診斷服務

傳染性疾病

CMV PCR	快速診斷和定量監控巨細胞病毒感染的情況
EBV PCR	鼻咽癌的篩檢及監控治療進度
H5N1 PCR	快速篩檢和診斷H5N1病毒
HBV PCR	定量監控乙型肝炎病毒感染的情況和治療效用
YMDD	基因突變分析以便選擇合適治療方法
HCV PCR	診斷丙型肝炎病毒及監控治療進度 基因分型以便選擇合適治療方法
HPV PCR	篩檢高危類型的人類乳頭狀瘤病毒基因 為子宮頸普查和疫苗接種，進行人類乳頭狀瘤病毒基因篩檢及分型

臨床腫瘤科

白血病 PCR 及基因突變	對 CML、ALL、AML 和 APL 等病之診斷、監控、預後，並有助分析選擇針對性治療方法
EGFR 基因突變分析	分子標靶治療
EGFR/HER2 Gene Amplification	有助選擇針對性治療方法 如單株抗體Trastuzumab來對抗致癌基因(HER2)高表現型乳癌之藥品單株抗體針對性藥物
癌症基因 BRCA1 & BRCA2	為患者及其直系親屬進行遺傳性乳癌和卵巢癌普查
微衛星分析	為患者進行遺傳性結腸直腸癌普查
DNA MLH1 & MSH2 基因突變分析	為患者及其直系親屬進行遺傳性結腸直腸癌普查
CDH1 基因突變分析	為患者及其直系親屬進行家族性胃癌普查
C-KIT & PDGFRA 突變基因分析	有助選擇腸胃癌之治療方法

養和醫院
HONG KONG SANATORIUM & HOSPITAL

分子診斷

病理化驗的新領域

傳染病

臨床腫瘤學

遺傳基因異常