

DOI 10.3760/cma.j.issn.1671-0282.2019.02.005

[9-10] mNGS

mNGS

()

50% [1-3]

mNGS

[11-12]

66.7 /10

mNGS

103 [3]

[9-16]

[17]

mNGS

Crumaz [18]

(metagenomics next-

Gosiewski

1671-0282(201902)28:005:1;1-3

generation sequencing, mNGS)

[4-8]

mNGS

_ @9E

8 000

3 000

4 000

200

140

2008

\$ _@9E

mNGS

mNGS

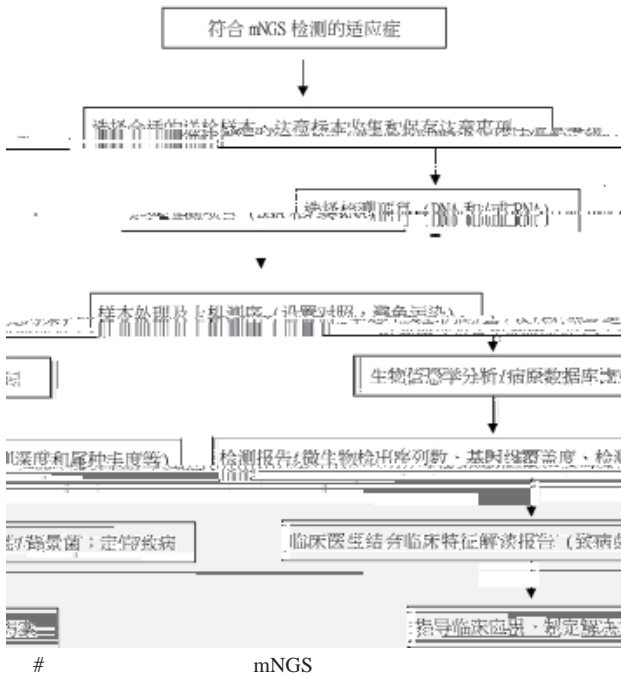
1

mNGS

mNGS

#			
3			
mL	K/G	6~35	6~35
	1.5 (DNA/RNA)		
mL			
1.2 mL		DNA	1
		-20	
		-80	
3 mL			
		RNA	
		-80	

/



/
40%~50%

1
(2)

(3) mNGS

% _@9E

(4) DNA

%#

PCR
Agilent 2100 Bioanalyzer

(1)

mNGS

1

:

[7,22-23] %& _ @9 E
mNGS (reads)
Reads

%\$ Reads

90%
(reads) 50 bp
20 M

[24-25]

& '• +yyRQ€% P Â'q}²yDhóÙ3²t1©À/ TD(2)Tj/TT1 T4f2.7008 0
2TT1e
2T1T1è• +@05E+ ° :L4*ñ È Ú *K'• ì "wjœB ì "p",K'• ¶ ì "° E, √

%%

[26]

[27-30]

7 mNGS

8 mNGS

' _@9E

1

mNGS

2 /

[31] mNGS mNGS

3 RNA RNA RNA

4 RNA RNA mNGS

