

Poster presentation

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## Study on the HIV drug resistance and its influencing factors in China

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### Objective

To investigate HIV drug resistance and its influencing factors, and then provide scientific evidence for antiretroviral therapy and reducing drug resistance.

### Methods

Questionnaires and blood sample collection for drug resistance detection were conducted among 109 treated cases and 84 non-treated cases. Viral load was detected by NASBA and drug resistance was measured by nested PCR.

### Results

The viral load of 95 cases (27 treated cases and 68 non-treated cases) was more than 1 000 copies/ml. The rate of drug resistance of treated and non-treated group was 40.74% and 10.29% respectively (see Table 1). The rate of

different drug resistance was higher significantly in treated group than in no-treated group. However, the sensitive of different drug resistance was lower significantly in treated group than in no-treated group (see Table 2). Therapy schedule of 17 treated cases was stopped due to a variety of reasons, such as death, dizziness, liver damage, belly-ache, et al (see Table 3). Except for five death cases, two suicides were discovered at 16 and 42 days respectively after stopping therapy.

### Conclusion

Antiviral therapy can effectively reduce the viral load and inhibit viral replication. Drug resistance exists differently among treated and non-treated HIV/AIDS cases. HIV gene mutation may be the key reason for drug resistance.

**Table 1: The results of drug resistance detection in 95 cases with AIDS**

Group	No.	Low-midrange resistance (%)	Height drug resistance (%)	Total of resistance (%)
Stopping therapy	12	0 (0.00)	3 (25.00)	3 (25.00)
Single therapy	11	0 (0.00)	6 (54.55)	6 (54.55)
Therapeutic alliance	4	0 (0.00)	2 (50.00)	2 (50.00)
No therapy	68	6 (8.82)	1 (1.47)	7 (10.29)

**Table 2: The results of resistance detection of different drugs among 95 cases**

Group	Drug	No.	Sensitive (%)	Drug resistance				Total (%)
				Low resistance	Midrange resistance	Height resistance	Latent resistance	
Therapy	DDI	27	19 (70.37)	1	1	6	0	8 (29.63)
	D4T	27	24 (88.89)	2	1	0	0	3 (11.11)
	EFV	27	15 (55.56)	0	1	9	2	12 (44.44)
	NVP	27	16 (59.26)	0	0	10	1	11 (40.74)
No therapy	DDI	68	66 (97.06)	1	0	0	3	4 (5.88)
	D4T	68	68 (100.00)	1	0	0	4	5 (7.35)
	EFV	68	65 (95.58)	1	2	0	0	3 (4.41)
	NVP	68	65 (95.58)	1	2	1	0	3 (4.41)

**Table 3: The reasons of stopping therapy**

Course of treatment (Months)	Death	Liver damage	Dizziness	Skin damage	Bellyache	Total (%)
0~	1	1	3	-	-	5 (29.41)
1~	2	2	1	1	1	7 (41.18)
2~	2	-	1	-	-	3 (17.65)
...						
7~		1		1		2 (11.76)
Total (%)	5 (29.41)	4 (23.53)	5 (29.41)	2 (11.76)	1 (5.88)	17 (100)