

# Identifying acute HIV-1 infection: implementation of a rapid diagnostic and referral strategy

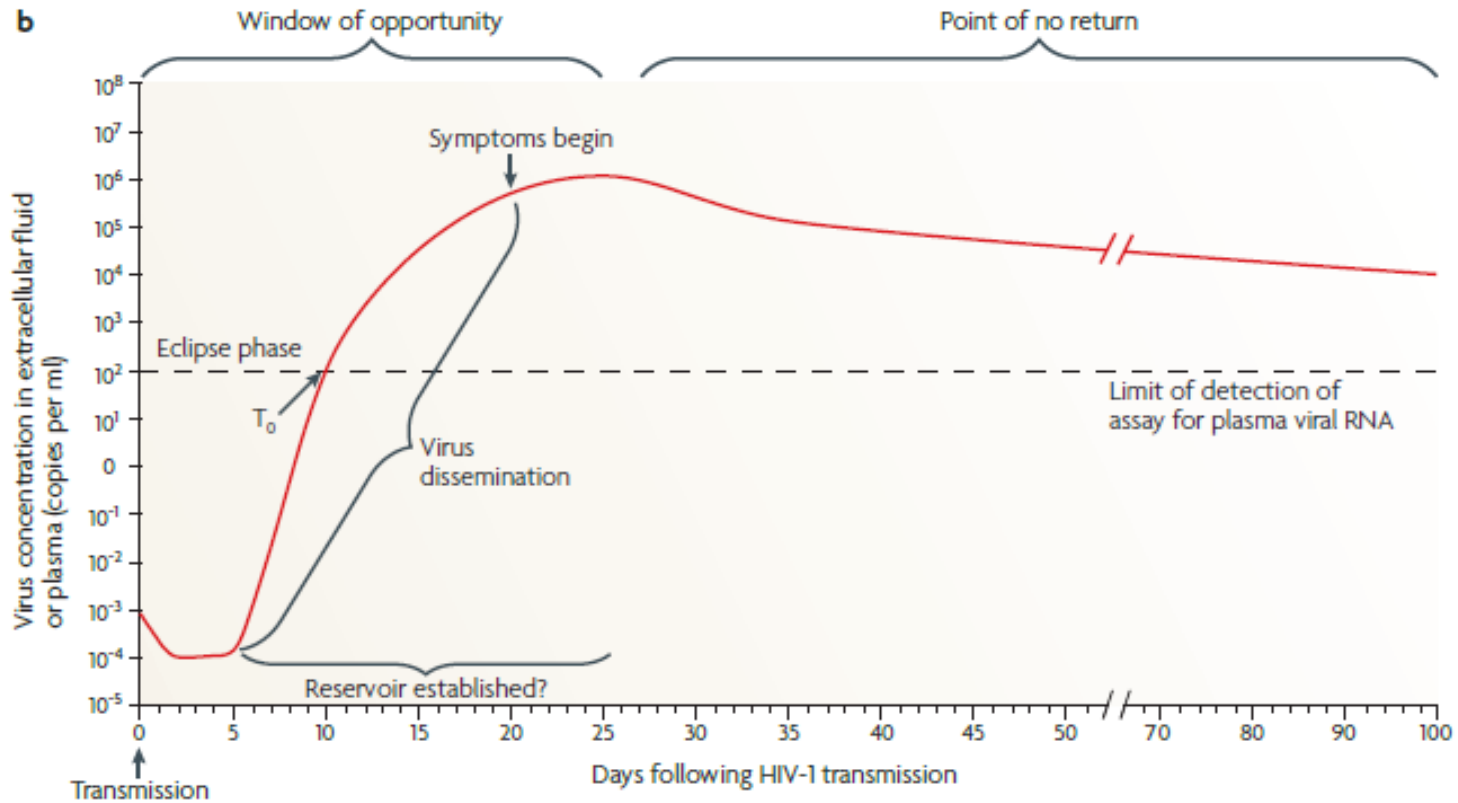
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# Disclosure of interests

<b>No conflict of interest</b>	
<b>Potentially relevant company relationships in connection with event</b>	<b>Company name</b>
<ul style="list-style-type: none"><li>• <i>Sponsoring or research grants</i></li><li>• <i>Honorarium or other (financial) compensation</i></li><li>• <i>Shareholder</i></li><li>• <i>Other relationship, namely..</i></li></ul>	

# Acute HIV-1 infection



# Identifying acute HIV-1 infection and early treatment

1. Beneficial for patients
2. Reduce onward transmission
3. Insight into “post treatment control”

# Objectives

- To identify acute HIV-1 infection among MSM at risk in Amsterdam
- To implement a rapid diagnostic and referral strategy including a point-of-care HIV-1 RNA test at the Public Health Service of Amsterdam

# Methods - inclusion



## Eligible MSM:

- Condomless anal sex in previous 2 weeks to 3 months
- Symptoms associated with acute HIV-1 infection

1. Self referral by media campaign: [www.hebikhiv.nl](http://www.hebikhiv.nl)
2. Referral by general practitioner
3. Referral during routine STI clinic consultation

# Methods – STI clinic

- New diagnostic algorithm for acute HIV-1 infection:
  - Rapid antibody test
  - If negative: point-of-care HIV-1 RNA test and combo Ag/Ab test
- Test results within 4 hours
- Acute HIV-1 infection: Fiebig I-II
- Recent HIV-1: Fiebig III-V
- In case of new HIV diagnosis: referral to HIV treatment centre within 24 hr

# Results rapid acute HIV-1 strategy

August 2015 through October 2016:

- 199 MSM presented for AHI testing
- Source of 171 tested MSM
  - 43.9% website/campaign
  - 6.4% GP
  - 34.5% routine STI screening
  - 15.2% other
- Median age 33 years (IQR 26-42)
- Number of HIV-1 diagnoses: 15/171 (8.8%)



# Test results MSM detected HIV-1+

Case	Age	RNA	Combo P24	Ab	Rapid test	Blot	Fiebig	Diagnosis
1	33	+	-	-	-	NP	I	Acute HIV-1
2	25	+	-	-	-	NP	I	Acute HIV-1

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2	25	+	-	-	-	NP	I	Acute HIV-1
3	41	+	+	-	-	-	II	Acute HIV-1
4	47	+	+	-	-	-	II	Acute HIV-1
5	58	+	+	-	-	-	II	Acute HIV-1
6	38	+	+	-	-	-	II	Acute HIV-1
7	29	+	+	-	±	-	II	Acute HIV-1

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5	58	+	+	-	-	-	II	Acute HIV-1
6	38	+	+	-	-	-	II	Acute HIV-1
7	29	+	+	-	±	-	II	Acute HIV-1
8	22	+	+	+	-	-	III	Recent HIV-1
9	31	+	+	+	-	-	III	Recent HIV-1
10	23	+	-	+	-	-	III	Recent HIV-1
11	25	+	+	+	±	±	IV	Recent HIV-1
12	58	+	+	+	±	±	V	Recent HIV-1
13	21	+	+	+	±	+	V	Recent HIV-1

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6	38	+	+	-	-	-	II	Acute HIV-1
7	29	+	+	-	±	-	II	Acute HIV-1
8	22	+	+	+	-	-	III	Recent HIV-1
9	31	+	+	+	-	-	III	Recent HIV-1
10	23	+	-	+	-	-	III	Recent HIV-1
11	25	+	+	+	±	±	IV	Recent HIV-1
12	58	+	+	+	±	±	V	Recent HIV-1
13	21	+	+	+	±	+	V	Recent HIV-1
14	47	NP	+	+	+	+	VI	Established HIV-1
15	34	+	+	+	+	+	VI	Established HIV-1

# Conclusion

- Thus far, the rapid acute HIV-1 strategy has been successful: during 15 months 13/171 (7.6%) MSM were diagnosed with acute or recent HIV-1 and 2/171 (1.2%) with established HIV-1 infection
- The addition of a point-of-care HIV-1 RNA test diagnosed 2/15 extra cases (Fiebig I)
- And ensured same-day results and immediate start of ART

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