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Data article

Data on hepatitis B, C signs, and HIV-aids among middle-aged and older IDUs in Southwest Iran

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ABSTRACT

Presented data was gathered from a local rehabilitation & caring center in Ahwaz city, southwest Iran end-2017. Data was classified in the six sections upon two predictors i.e. years of imprisonments and Injecting Drug Users (IDUs) to predict three blood infectious diseases i.e. HIV-Aids, Hepatitis B Virus (HBV), & Hepatitis C Virus (HCV). Each section jointly includes the following: tables of raw data, input data concerning false & true positive fractions (18 tables), scatter graph concerning false positive fractions (FPF) & true positive fractions (TPF) (6 graphs), and six ROC curves. The full access to data set is available at Mendeley data repository via <http://dx.doi.org/10.17632/6s9yzm7hr7.1>.

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Specifications table

Subject area	Health Sciences, Aging, Social Pathology, Prison Studies
More specific subject area	Hepatitis and HIV in Middle & Older Adults
Type of data	Table, text file, graph

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How data was acquired	Field survey, Field investigation with residents, Review of reports
Data format	Raw & filtered
Experimental factors	Nil.
Experimental features	Based on patients' view & laboratory reports
Data source location	Ahwaz, Iran: 31°21'47.7"N & 48°44'05.6"E
Data accessibility	Brief data is presented with this article and the full access to data set is available at: Asadollahi, Abdolrahim (2018), "Hepatitis B, C Signs and HIV-Aids among Middle-Aged and Older IDUs in the Southwest Iran", Mendeley Data, v1 http://dx.doi.org/10.17632/6s9yzm7hr7.1

Value of the data

- The data shows the health status of IDUs and prisoners in Ahwaz city, Iran.
 - Data show the actual effectiveness and outcomes of imprisonments and IDU records in the health prisoners.
 - The data helps to know the preferences of the HIV-Aids patients on the urban & prison settlements.
 - The data helps to know the preferences of the HBV and HCV patients on the urban & prison settlements.
 - Also, the dataset can help health care providers and policymakers in preventing and controlling diseases associated with blood infections in particular social group i.e. prisoners, refugees, gangs, vandals, addicts, & IDUs.
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1. Data

Presented data classified in six sections upon two predictors i.e. years of imprisonments and IDU to predict three blood infectious diseases i.e. HIV-Aids, HBV, & HCV. Each section jointly includes the following: tables of raw data, input data concerning false & true positive fractions (18 tables), scatter graph concerning FPF & TPF (6 graphs), and six ROC curves using web-based calculator for ROC curves at www.jrocf.it [1].

2. Experimental design, materials and methods

The cross-sectional method was done at the end-2017 in Ahwaz metropolitan, southwest Iran. About 133 injected drug abusers aged 40 to 71 years old (Mean age = 48.21 ± 10.4) were chosen from some addiction treatment centers. The data was collected from the setting in demographic and behavioral characteristics. Also, the serum samples were screened for those diseases. Their blood serum was evaluated for anti-hepatitis C, HIV-Aids, and antigen levels of hepatitis B by ELISA method. All positive cases from the ELISA analysis of HIV-Aids and HCV by immunoblot method were also evaluated (WB, Gene Labs Diagnostics, Ltd). The full data set is available online at Asadollahi, 2018 [2].

3. HBV & predictive variable years of IDU

See Tables 1–3 and Figs. 1, 2 here.

4. HBV & predictive variable years of imprisonment

See Tables 4–6 and Figs. 3, 4 here.

Table 1
Input data concerning years of IDU from the 125 actually negative HBV cases.

Scores from the 125 actually negative cases:

8	6	6	18	18
17	18	15	21	21
22	19	20	20	8
18	17	13	17	19
18	19	17	1	22
18	19	18	5	6
17	0	12	0	0
8	3	14	0	10
0	0	0	7	0
0	0	0	0	0
0	16	17	0	0
0	13	10	10	16
7	15	17	13	0
19	17	12	0	17
0	16	16	0	11
0	16	23	15	18
20	10	9	8	17
10	7	9	20	18
17	10	8	13	7
16	17	19	7	18
18	9	22	9	17
18	23	17	14	21
20	20	21	19	16
15	16	9	19	17
17	21	3	21	3

Scores from the 8 actually positive cases: 8 17 17 22 16 21 20 20.

Larger values of the test result represent stronger evidence that the case is actually positive (e.g., that the patient is actually abnormal).

Number of actually negative cases=125.

Number of actually positive cases=8.

Table 2
Input data concerning false & true positive fractions in HBV & years of IDU.

FPF	TPF	Lower	Upper
0	0	0	0
0.005	0.0097	0.0001	0.2116
0.01	0.022	0.0003	0.2636
0.02	0.0485	0.0021	0.3301
0.03	0.0757	0.0053	0.3778
0.04	0.1028	0.0102	0.4166
0.05	0.1296	0.0166	0.4512
0.06	0.156	0.0243	0.4798
0.07	0.1818	0.0333	0.5069
0.08	0.2071	0.0434	0.5319
0.09	0.2318	0.0543	0.5553
0.10	0.2559	0.0659	0.5773
0.11	0.2795	0.0782	0.5981
0.12	0.3024	0.0913	0.6179
0.13	0.3248	0.1041	0.6368
0.14	0.3467	0.1176	0.6548
0.15	0.3679	0.1313	0.6722
0.22	0.4665	0.2006	0.749
0.25	0.553	0.2679	0.8121
0.31	0.6286	0.3306	0.8632
0.42	0.7519	0.4412	0.9343
0.50	0.8435	0.5351	0.9732
0.61	0.9095	0.6177	0.9912
0.74	0.9544	0.694	0.998
0.83	0.9822	0.7684	0.9997
0.91	0.9962	0.8481	1
0.95	0.9992	0.8965	1
1	1	1	1

Table 3

Estimated binormal Roc curve, with lower & upper bounds of the asymmetric 95% confidence interval for true-positive fraction at a variety of false-positive fractions.

FPF	TPF	95% Conf. interval
0.005	0.0097	(0.0001, 0.2116)
0.010	0.0220	(0.0003, 0.2636)
0.020	0.0485	(0.0020, 0.3301)
0.030	0.0757	(0.0053, 0.3778)
0.040	0.1028	(0.0102, 0.4166)
0.050	0.1296	(0.0166, 0.4500)
0.060	0.1560	(0.0243, 0.4798)
0.070	0.1818	(0.0333, 0.5069)
0.080	0.2071	(0.0434, 0.5319)
0.090	0.2318	(0.0543, 0.5553)
0.100	0.2559	(0.0659, 0.5773)
0.110	0.2795	(0.0782, 0.5981)
0.120	0.3024	(0.0910, 0.6179)
0.130	0.3248	(0.1041, 0.6368)
0.140	0.3467	(0.1176, 0.6548)
0.150	0.3679	(0.1313, 0.6722)
0.200	0.4665	(0.2006, 0.7490)
0.250	0.5530	(0.2679, 0.8121)
0.300	0.6286	(0.3306, 0.8632)
0.400	0.7519	(0.4412, 0.9343)
0.500	0.8435	(0.5351, 0.9732)
0.600	0.9095	(0.6177, 0.9912)
0.700	0.9544	(0.6940, 0.9980)
0.800	0.9822	(0.7684, 0.9997)
0.900	0.9962	(0.8481, 1.0000)
0.950	0.9992	(0.8965, 1.0000)

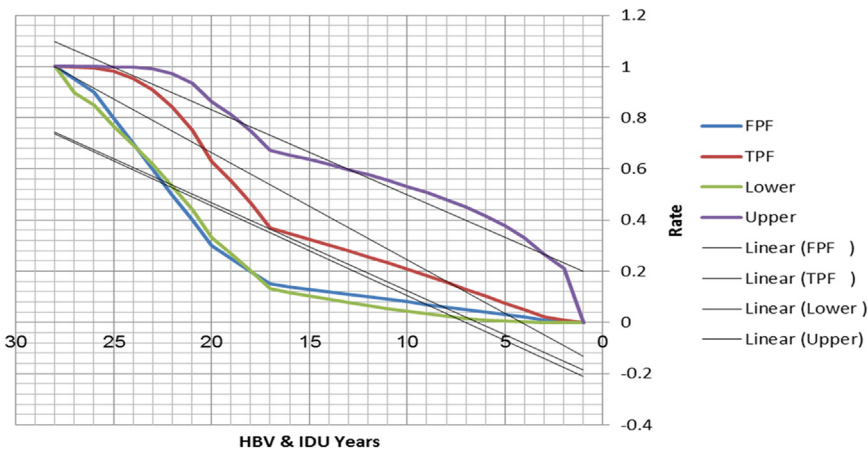


Fig. 1. Scatter Graph Concerning False & True Positive Fractions in Years of IDU and HBV. Total Cases: 133, Positive Cases: 8, Negative Cases: 125, FPF: False Positive Fraction, TPF: True Positive Fraction, Fitted ROC Area: 0.731.

5. HCV & predictive variable years of IDU

See Tables 7–9 and Figs. 5, 6 here.

6. HCV & predictive variable years of imprisonment

See Tables 10–12 and Figs. 7, 8 here.

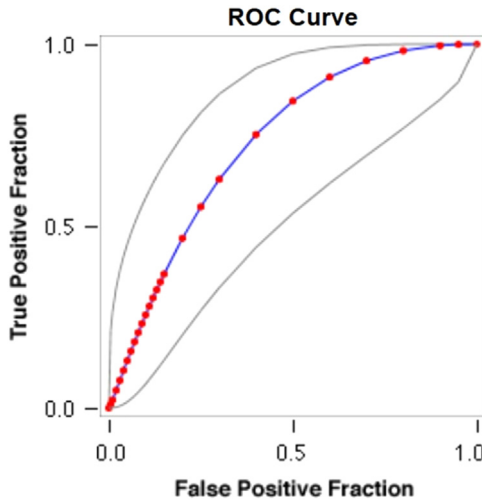


Fig. 2. ROC Curve Concerning FPF & TPF in Years of IDU and HBV. Red symbols and Blue line: Fitted ROC curve, Gray lines: 95% confidence interval of the fitted ROC curve, Black symbols ± Green line: Points making up the empirical ROC curve. Area Under Roc Curve: Area under fitted curve (A_z)=**0.7309**, Estimated std. error=0.0793, Trapezoidal (Wilcoxon) area=0.7260, Estimated std. error=0.1043.

Table 4

Input data concerning years of imprisonment from the 125 actually negative HBV cases.

Scores from the 125 actually negative cases:

0	0	7	0	0
9	7	7	0	0
0	6	5	7	0
5	0	0	0	0
0	5	2	2	7
2	7	5	2	5
6	5	7	1	4
5	5	7	2	3
4	4	2	6	7
2	6	8	4	2
4	5	4	6	4
7	2	6	2	4
6	4	6	5	5
4	4	4	4	5
4	11	6	5	7
6	6	2	4	6
6	1	6	5	5
7	7	4	3	7
5	4	3	11	3
8	7	5	8	8
4	7	7	7	3
5	8	8	15	3
8	4	5	7	5
4	7	4	11	4
8	11	8	3	3

Scores from the 8 actually positive cases: 7 7 10 6 12 7 13 21.

Larger values of the test result represent stronger evidence that the case is actually positive (e.g., that the patient is actually abnormal).

Number of actually negative cases=125.

Number of actually positive cases=8.

Table 5

Input data concerning false & true positive fractions in years of imprisonment and HBV.

FPF	TPF	Lower	Upper
0	0	0	0
0.005	0.1543	0.0157	0.5465
0.01	0.2262	0.0389	0.6029
0.02	0.3227	0.0869	0.6701
0.03	0.3916	0.1313	0.7156
0.04	0.4459	0.1711	0.751
0.05	0.4909	0.2066	0.7801
0.06	0.5293	0.2383	0.8047
0.07	0.5627	0.2667	0.826
0.08	0.5923	0.2923	0.8446
0.09	0.6188	0.3156	0.861
0.1	0.6427	0.3367	0.8754
0.11	0.6644	0.3562	0.8883
0.12	0.6842	0.374	0.8998
0.13	0.7025	0.3906	0.91
0.14	0.7193	0.4059	0.9192
0.15	0.7349	0.4203	0.9274
0.2	0.7985	0.48	0.9575
0.25	0.8449	0.5262	0.9752
0.3	0.8801	0.564	0.9857
0.4	0.9286	0.6242	0.9955
0.5	0.9587	0.6728	0.9988
0.6	0.9776	0.7155	0.9997
0.7	0.9892	0.7556	1
0.8	0.9958	0.7965	1
0.9	0.9991	0.8438	1
0.95	0.9998	0.8759	1
1	1	1	1

Table 6

Estimated binormal Roc curve, with lower & upper bounds of the asymmetric 95% confidence interval for true-positive fraction at a variety of false-positive fractions.

FPF	TPF	95% Conf. interval
0.005	0.1543	(0.0157, 0.5465)
0.010	0.2262	(0.0389, 0.6029)
0.020	0.3227	(0.0869, 0.6701)
0.030	0.3916	(0.1313, 0.7156)
0.040	0.4459	(0.1711, 0.7510)
0.050	0.4909	(0.2066, 0.7801)
0.060	0.5293	(0.2383, 0.8047)
0.070	0.5627	(0.2667, 0.8260)
0.080	0.5923	(0.2923, 0.8446)
0.090	0.6188	(0.3156, 0.8610)
0.100	0.6427	(0.3367, 0.8754)
0.110	0.6644	(0.3562, 0.8883)
0.120	0.6842	(0.3740, 0.8998)
0.130	0.7025	(0.3906, 0.9100)
0.140	0.7193	(0.4059, 0.9192)
0.150	0.7349	(0.4203, 0.9274)
0.200	0.7985	(0.4800, 0.9575)
0.250	0.8449	(0.5262, 0.9752)
0.300	0.8801	(0.5640, 0.9857)
0.400	0.9286	(0.6242, 0.9955)
0.500	0.9587	(0.6728, 0.9988)
0.600	0.9776	(0.7155, 0.9997)
0.700	0.9892	(0.7556, 1.0000)
0.800	0.9958	(0.7965, 1.0000)
0.900	0.9991	(0.8438, 1.0000)
0.950	0.9998	(0.8759, 1.0000)

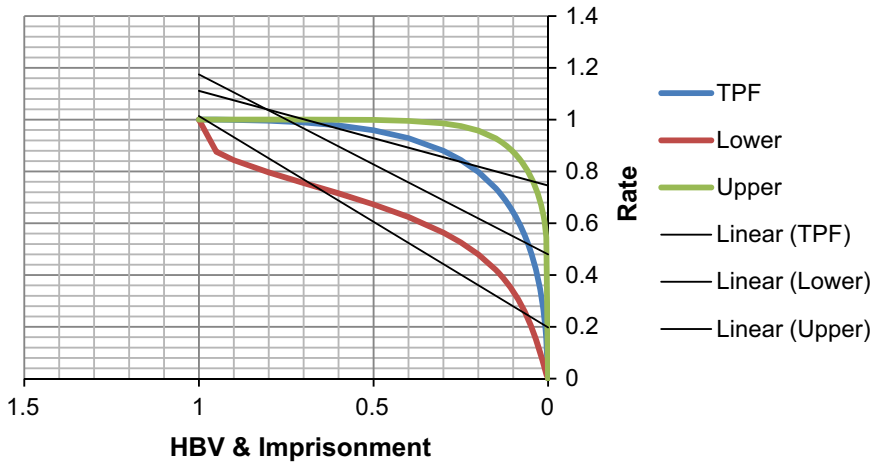


Fig. 3. Scatter Graph Concerning False & True Positive Fractions in Years of Imprisonment and HBV. Total Cases: 133, Positive Cases: 8, Negative Cases: 125, Fitted ROC Area: 0.882.

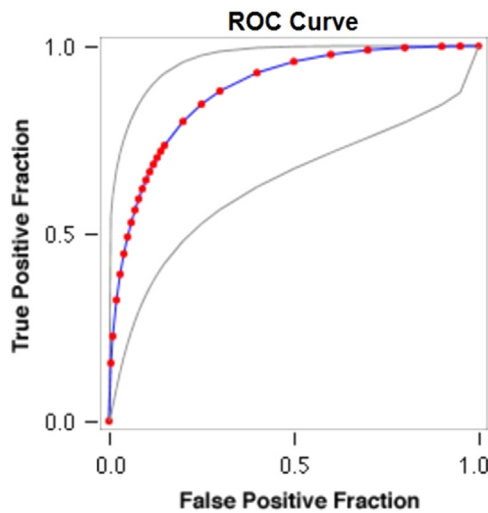


Fig. 4. ROC Curve Concerning FPF & TPF in Years of Imprisonment and HBV. Key for the ROC Plot. Red symbols and Blue line: Fitted ROC curve, Gray lines: 95% confidence interval of the fitted ROC curve, Black symbols ± Green line: Points making up the empirical ROC curve. Area Under Roc Curve: Area under fitted curve (A_z)=0.8821, Estimated std. error=0.0605, Trapezoidal (Wilcoxon) area=0.8760, Estimated std. error=0.0805

7. HIV-Aids & predictive variable years of IDU

See Tables 13–15 and Figs. 9, 10 here.

8. HIV-Aids & predictive variable years of imprisonment

See Tables 16–18 and Figs. 11, 12 here.

Table 7

Input data concerning years of IDU from the 122 actually negative HCV cases.

<i>Scores from the 122 actually negative cases:</i>				
8	8	6	6	18
18	17	18	15	21
17	21	22	19	20
20	22	16	21	8
18	17	13	17	19
18	19	20	17	20
22	18	19	18	5
0	12	0	0	3
14	0	10	0	0
0	0	0	0	0
0	0	0	17	0
0	0	13	10	10
7	15	17	13	0
19	17	12	0	17
0	16	16	0	11
0	16	23	15	18
20	10	9	8	10
7	9	20	17	10
8	13	7	16	17
19	7	18	18	9
22	9	17	18	23
17	14	21	20	20
21	19	16	15	16
9	19	17	21	3
21	3			

Scores from the 11 actually positive cases: 7 16 16 17 18 17 1 6 17 8 17.

Larger values of the test result represent stronger evidence that the case is actually positive (e.g., that the patient is actually abnormal).

Number of actually negative cases = 122.

Number of actually positive cases = 11.

Table 8

Input data concerning false & true positive fractions in HCV & years of IDU.

FPF	TPF	Lower	Upper
0	0	0	0
0.005	0	0	0.0035
0.01	0	0	0.0076
0.02	0	0	0.0165
0.03	0	0	0.026
0.04	0.0001	0	0.0359
0.05	0.0002	0	0.0462
0.06	0.0003	0	0.0568
0.07	0.0006	0	0.0677
0.08	0.0009	0	0.0788
0.09	0.0014	0	0.0901
0.1	0.0021	0	0.1017
0.11	0.003	0	0.1134
0.12	0.0041	0	0.1253
0.13	0.0055	0	0.1374
0.14	0.0072	0.0001	0.1497
0.15	0.0092	0.0001	0.1622
0.2	0.0254	0.0008	0.2271
0.25	0.0538	0.0037	0.296
0.3	0.0969	0.0118	0.369
0.4	0.2295	0.0608	0.5269
0.5	0.4133	0.1715	0.6951
0.6	0.6189	0.3315	0.851
0.7	0.8055	0.5079	0.9557
0.8	0.9352	0.6806	0.9948
0.9	0.9923	0.8451	0.9999
0.95	0.9992	0.9244	1
1	1	1	1

Table 9

Estimated binormal Roc curve, with lower & upper bounds of the asymmetric 95% confidence interval for true-positive fraction at a variety of false-positive fractions.

FPF	TPF	95% Conf. interval
0.005	0.0000	(0.0000, 0.0035)
0.010	0.0000	(0.0000, 0.0076)
0.020	0.0000	(0.0000, 0.0165)
0.030	0.0000	(0.0000, 0.0260)
0.040	0.0001	(0.0000, 0.0359)
0.050	0.0002	(0.0000, 0.0462)
0.060	0.0003	(0.0000, 0.0568)
0.070	0.0006	(0.0000, 0.0677)
0.080	0.0009	(0.0000, 0.0788)
0.090	0.0014	(0.0000, 0.0901)
0.100	0.0021	(0.0000, 0.1017)
0.110	0.0030	(0.0000, 0.1134)
0.120	0.0041	(0.0000, 0.1253)
0.130	0.0055	(0.0000, 0.1374)
0.140	0.0072	(0.0001, 0.1497)
0.150	0.0092	(0.0001, 0.1622)
0.200	0.0254	(0.0008, 0.2271)
0.250	0.0538	(0.0037, 0.2960)
0.300	0.0969	(0.0118, 0.3690)
0.400	0.2295	(0.0608, 0.5269)
0.500	0.4133	(0.1715, 0.6951)
0.600	0.6189	(0.3315, 0.8510)
0.700	0.8055	(0.5079, 0.9557)
0.800	0.9352	(0.6806, 0.9948)
0.900	0.9923	(0.8451, 0.9999)
0.950	0.9992	(0.9244, 1.0000)

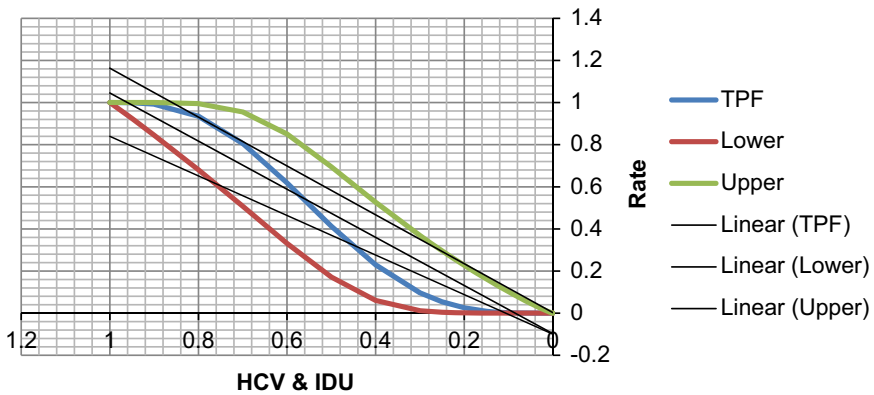


Fig. 5. Scatter Graph Concerning False & True Positive Fractions in HCV & Years of IDU. Total Cases: 133, Positive Cases: 11, Negative Cases: 122, Fitted ROC Area: 0.562.

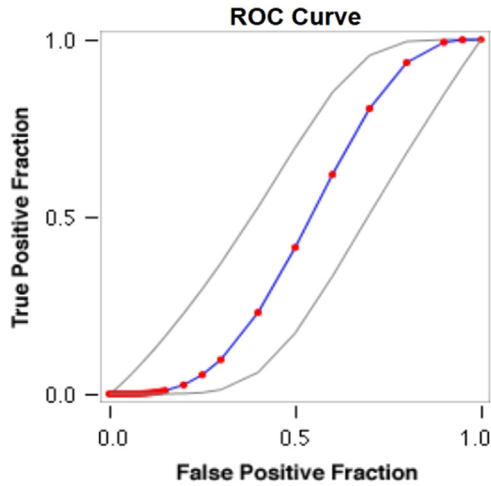


Fig. 6. ROC Curve Concerning FPF & TPF in HCV & Years of IDU. Red symbols and Blue line: Fitted ROC curve, Gray lines: 95% confidence interval of the fitted ROC curve, Black symbols ± Green line: Points making up the empirical ROC curve. Area Under Roc Curve: Area under fitted curve (Az)=**0.4619**, Estimated std. error=0.0638, Trapezoidal (Wilcoxon) area=0.4694, Estimated std. error=0.0895.

Table 10

Input data concerning years of imprisonment from the 127 actually negative HCV cases.

Scores from the 127 actually negative cases				
7	0	0	0	0
7	9	7	7	0
0	6	5	7	0
5	6	0	0	0
0	0	5	7	2
2	7	2	7	5
2	5	6	5	7
1	4	5	5	7
2	13	3	4	4
2	6	7	2	6
8	4	2	4	5
4	6	4	7	2
6	2	4	6	4
6	5	5	4	4
4	4	5	4	6
5	7	6	6	2
4	6	6	1	6
5	5	7	7	4
3	7	5	4	3
11	3	8	7	5
8	8	4	7	7
7	3	5	8	8
15	3	8	4	5
7	5	4	7	4
11	4	8	11	8
7	0	0	0	0

Scores from the 6 actually positive cases.

7 0 10 12 11 21.

Larger values of the test result represent stronger evidence that the case is actually positive (e.g., that the patient is actually abnormal).

Number of actually negative cases=127.

Number of actually positive cases=6.

Table 11

Input data concerning false & true positive fractions in HCV & years of imprisonment.

FPF	TPF	Lower	Upper
0	0	0	0
0.005	0.3001	0.0605	0.6922
0.01	0.3438	0.0843	0.7167
0.02	0.3942	0.1158	0.7451
0.03	0.4271	0.1385	0.7641
0.04	0.4523	0.1567	0.7788
0.05	0.4729	0.1721	0.7909
0.06	0.4905	0.1856	0.8014
0.07	0.5059	0.1976	0.8106
0.08	0.5197	0.2084	0.8189
0.09	0.5323	0.2183	0.8264
0.1	0.5438	0.2275	0.8333
0.11	0.5545	0.236	0.8397
0.12	0.5645	0.244	0.8457
0.13	0.5738	0.2515	0.8513
0.14	0.5827	0.2586	0.8566
0.15	0.5911	0.2654	0.8616
0.2	0.6277	0.2948	0.8832
0.25	0.6583	0.3193	0.9006
0.3	0.6849	0.3405	0.9153
0.4	0.7304	0.3764	0.9386
0.5	0.7698	0.4072	0.9565
0.6	0.8057	0.4353	0.9704
0.7	0.8401	0.4628	0.9814
0.8	0.875	0.4919	0.9899
0.9	0.9141	0.5275	0.9961
0.95	0.9387	0.5535	0.9984
1	1	1	1

Table 12

Estimated binormal Roc curve, with lower & upper bounds of the asymmetric 95% confidence interval for true-positive fraction at a variety of false-positive fractions.

FPF	TPF	95% Conf. interval
0.005	0.3001	(0.0605, 0.6922)
0.010	0.3438	(0.0843, 0.7167)
0.020	0.3942	(0.1158, 0.7451)
0.030	0.4271	(0.1385, 0.7641)
0.040	0.4523	(0.1567, 0.7788)
0.050	0.4729	(0.1721, 0.7909)
0.060	0.4905	(0.1856, 0.8014)
0.070	0.5059	(0.1976, 0.8106)
0.080	0.5197	(0.2084, 0.8189)
0.090	0.5323	(0.2183, 0.8264)
0.100	0.5438	(0.2275, 0.8333)
0.110	0.5545	(0.2360, 0.8397)
0.120	0.5645	(0.2440, 0.8457)
0.130	0.5738	(0.2515, 0.8513)
0.140	0.5827	(0.2586, 0.8566)
0.150	0.5911	(0.2654, 0.8616)
0.200	0.6277	(0.2948, 0.8832)
0.250	0.6583	(0.3193, 0.9006)
0.300	0.6849	(0.3405, 0.9153)
0.400	0.7304	(0.3764, 0.9386)
0.500	0.7698	(0.4072, 0.9565)
0.600	0.8057	(0.4353, 0.9704)
0.700	0.8401	(0.4628, 0.9814)
0.800	0.8750	(0.4919, 0.9899)
0.900	0.9141	(0.5275, 0.9961)
0.950	0.9387	(0.5535, 0.9984)

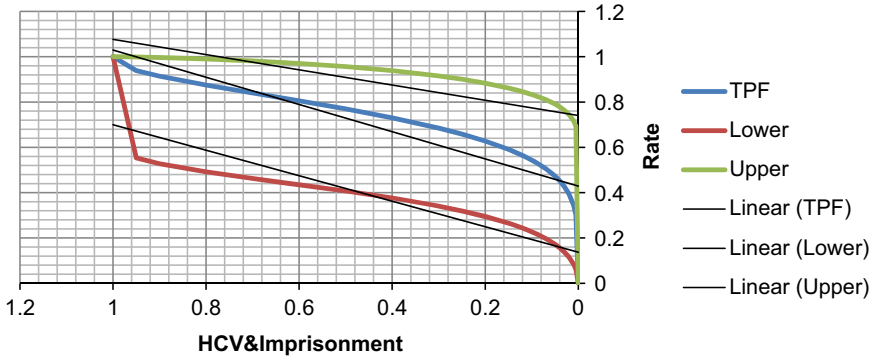


Fig. 7. Scatter Graph Concerning False & True Positive Fractions in HCV & Years of Imprisonment. Total Cases: 133, Positive Cases: 6, Negative Cases: 127, Fitted ROC Area: 0.746.

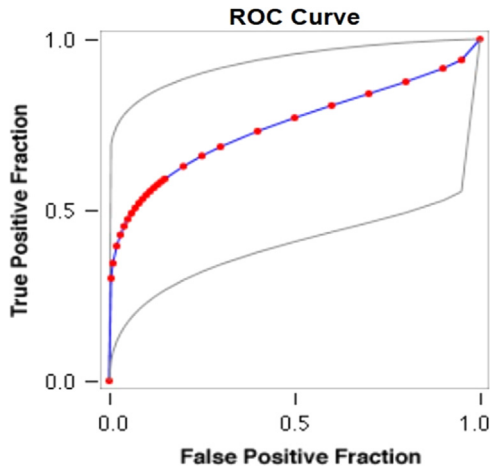


Fig. 8. ROC Curve Concerning FPF & TPF in HCV & Years of Imprisonment. Red symbols and Blue line: Fitted ROC curve, Gray lines: 95% confidence interval of the fitted ROC curve, Black symbols ± Green line: Points making up the empirical ROC curve. Area Under Roc Curve: Area under fitted curve (Az)=0.7463, Estimated std. error=0.1355, Trapezoidal (Wilcoxon) area=0.7933, Estimated std. error=0.1113.

Table 13
Input data concerning years of IDU from the 127 actually negative HIV cases.

Scores from the 127 actually negative cases:

8	8	6	6	18
18	17	17	18	15
21	17	21	22	19
20	20	22	16	21
8	18	17	13	17
19	18	19	20	17
1	20	22	18	19
18	5	6	17	0
12	0	0	8	3
14	0	10	0	0
0	7	0	0	0

Table 13 (continued)

Scores from the 127 actually negative cases:				
0	0	0	0	16
17	0	0	0	13
10	10	16	7	15
17	13	0	19	17
12	0	17	0	16
16	0	11	0	16
23	15	18	20	10
9	8	17	10	7
20	18	17	10	8
13	7	16	17	19
7	18	18	9	22
9	17	18	23	14
21	20	19	16	16
9	19	17	21	3
21	3			

Scores from the 6 actually positive cases: 9 17 20 21 15 17.

Larger values of the test result represent stronger evidence that the case is actually positive (e.g., that the patient is actually abnormal).

Number of actually negative cases = 127.

Number of actually positive cases = 6.

Table 14

Input data concerning false & true positive fractions in HIV & years of IDU.

FPF	TPF	Lower	Upper
0	0	0	0
0.005	0.0006	0	0.1691
0.01	0.0021	0	0.2112
0.02	0.0074	0	0.2658
0.03	0.015	0.0001	0.3054
0.04	0.0245	0.0002	0.338
0.05	0.0356	0.0005	0.3664
0.06	0.0479	0.0011	0.392
0.07	0.0613	0.002	0.4155
0.08	0.0757	0.0033	0.4376
0.09	0.0909	0.0051	0.4584
0.1	0.1068	0.0075	0.4783
0.11	0.1233	0.0104	0.4973
0.12	0.1403	0.014	0.5158
0.13	0.1577	0.0182	0.5336
0.14	0.1754	0.0231	0.551
0.15	0.1935	0.0286	0.568
0.2	0.2863	0.0658	0.6478
0.25	0.3798	0.1157	0.7206
0.3	0.4704	0.1729	0.7865
0.4	0.6346	0.2912	0.8922
0.5	0.7687	0.4002	0.9574
0.6	0.8697	0.4976	0.988
0.7	0.9386	0.5875	0.9979
0.8	0.979	0.6761	0.9998
0.9	0.9967	0.774	1
0.95	0.9995	0.8365	1
1	1	1	1

Table 15

Estimated binormal Roc curve, with lower & upper bounds of the asymmetric 95% confidence interval for true-positive fraction at a variety of false-positive fractions.

FPF	TPF	95% Conf. interval
0.005	0.0006	(0.0000, 0.1691)
0.010	0.0021	(0.0000, 0.2112)
0.020	0.0074	(0.0000, 0.2658)
0.030	0.0150	(0.0001, 0.3054)
0.040	0.0245	(0.0002, 0.3380)
0.050	0.0356	(0.0005, 0.3664)
0.060	0.0479	(0.0011, 0.3920)
0.070	0.0613	(0.0020, 0.4155)
0.080	0.0757	(0.0033, 0.4376)
0.090	0.0909	(0.0051, 0.4584)
0.100	0.1068	(0.0075, 0.4783)
0.110	0.1233	(0.0104, 0.4973)
0.120	0.1403	(0.0140, 0.5158)
0.130	0.1577	(0.0182, 0.5336)
0.140	0.1754	(0.0231, 0.5510)
0.150	0.1935	(0.0286, 0.5680)
0.200	0.2863	(0.0658, 0.6478)
0.250	0.3798	(0.1157, 0.7206)
0.300	0.4704	(0.1729, 0.7865)
0.400	0.6346	(0.2912, 0.8922)
0.500	0.7687	(0.4002, 0.9574)
0.600	0.8697	(0.4976, 0.9880)
0.700	0.9386	(0.5875, 0.9979)
0.800	0.9790	(0.6761, 0.9998)
0.900	0.9967	(0.7740, 1.0000)
0.950	0.9995	(0.8365, 1.0000)

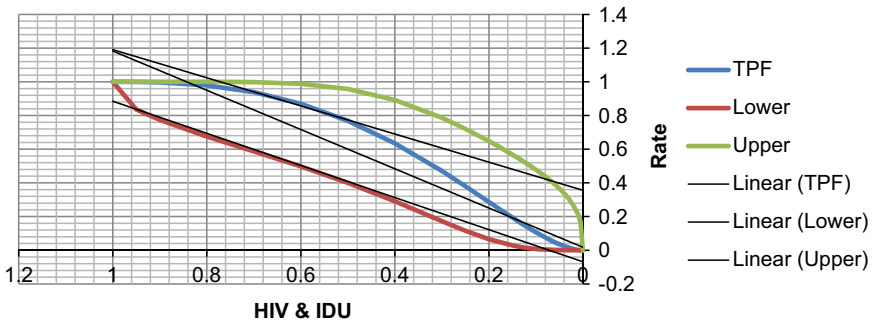


Fig. 9. Scatter Graph Concerning False & True Positive Fractions in HIV & Years of IDU. Total Cases: 133, Positive Cases: 6, Negative Cases: 127, Fitted ROC Area: 0.655.

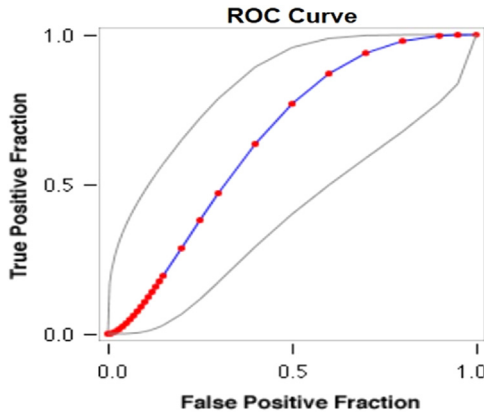


Fig. 10. ROC Curve Concerning FPF & TPF in HIV & Years of IDU. Red symbols and Blue line: Fitted ROC curve, Gray lines: 95% confidence interval of the fitted ROC curve, Black symbols ± Green line: Points making up the empirical ROC curve. Area Under Roc Curve: Area under fitted curve (Az)=**0.6552**, Estimated std. error=0.0897, Trapezoidal (Wilcoxon) area=0.6483, Estimated std. error=0.1246.

Table 16

Input data concerning years of imprisonment from the 131 actually negative HIV cases.

Scores from the 131 actually negative cases:

7	0	0	7	0
0	7	9	7	7
0	0	0	6	5
7	0	10	5	6
0	0	0	0	0
12	5	7	2	2
7	2	7	5	2
5	6	5	7	1
4	5	5	7	2
13	3	4	4	2
6	7	2	6	8
4	2	4	5	4
6	4	7	2	6
2	4	6	4	6
5	5	4	4	4
4	5	4	11	6
5	7	6	6	2
4	6	6	1	6
5	5	7	7	4
3	7	5	4	3
11	3	8	7	5
8	8	4	7	7
7	3	5	8	8
15	3	8	4	5
7	5	4	7	4
4	8	11	8	3

Scores from the 2 actually positive cases: 11 21.

Larger values of the test result represent stronger evidence that the case is actually positive (e.g., that the patient is actually abnormal).

Number of actually negative cases=131.

Number of actually positive cases=2.

Table 17

Input data concerning false & true positive fractions in HIV & years of imprisonment.

FPF	TPF	Lower
0	0	0
0.005	0.5788	0.0553
0.01	0.6768	0.1068
0.02	0.7713	0.1481
0.03	0.8221	0.1565
0.04	0.8553	0.154
0.05	0.8789	0.1477
0.06	0.8968	0.14
0.07	0.9109	0.132
0.08	0.9222	0.1242
0.09	0.9315	0.1167
0.1	0.9393	0.1096
0.11	0.9459	0.1029
0.12	0.9515	0.0967
0.13	0.9564	0.0909
0.14	0.9607	0.0855
0.15	0.9644	0.0804
0.2	0.9777	0.0595
0.25	0.9855	0.0444
0.3	0.9903	0.0332
0.4	0.9956	0.0185
0.5	0.998	0.0099
0.6	0.9992	0.005
0.7	0.9997	0.0022
0.8	0.9999	0.0008
0.9	1	0.0001
0.95	1	0
1	1	1

Table 18

Estimated binormal Roc curve, with lower & upper bounds of the asymmetric 95% confidence interval for true-positive fraction at a variety of false-positive fractions.

FPF	TPF	95% Conf. interval
.005	0.5788	(0.0553, 0.9769)
.010	0.6768	(0.1068, 0.9847)
.020	0.7713	(0.1481, 0.9943)
.030	0.8221	(0.1565, 0.9979)
.040	0.8553	(0.1540, 0.9991)
.050	0.8789	(0.1477, 0.9996)
.060	0.8968	(0.1400, 0.9998)
.070	0.9109	(0.1320, 0.9999)
.080	0.9222	(0.1242, 1.0000)
.090	0.9315	(0.1167, 1.0000)
.100	0.9393	(0.1096, 1.0000)
.110	0.9459	(0.1029, 1.0000)
.120	0.9515	(0.0967, 1.0000)
.130	0.9564	(0.0909, 1.0000)
.140	0.9607	(0.0855, 1.0000)
.150	0.9644	(0.0804, 1.0000)
.200	0.9777	(0.0595, 1.0000)
.250	0.9855	(0.0444, 1.0000)
.300	0.9903	(0.0332, 1.0000)
.400	0.9956	(0.0185, 1.0000)
.500	0.9980	(0.0099, 1.0000)
.600	0.9992	(0.0050, 1.0000)
.700	0.9997	(0.0022, 1.0000)
.800	0.9999	(0.0008, 1.0000)
.900	1.0000	(0.0001, 1.0000)
.950	1.0000	(0.0000, 1.0000)

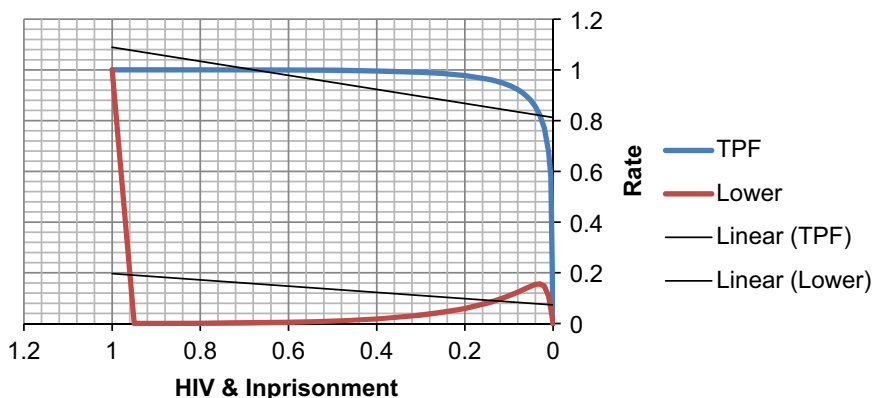


Fig. 11. Scatter Graph Concerning False & True Positive Fractions in HIV & Years of Imprisonment. Total Cases: 133, Positive Cases: 2, Negative Cases: 131, Fitted ROC Area: 0.977.

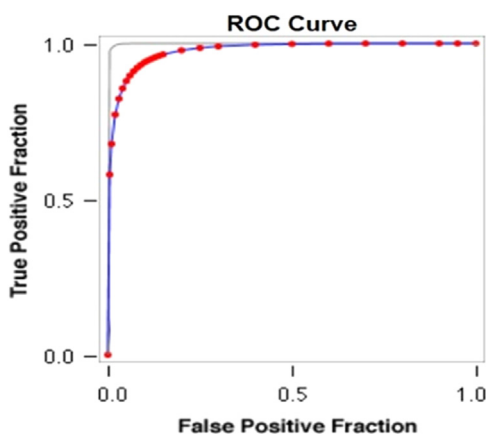


Fig. 12. ROC Curve Concerning FPF & TPF in HIV & Years of Imprisonment. Red symbols and Blue line: Fitted ROC curve, Gray lines: 95% confidence interval of the fitted ROC curve, Black symbols \pm Green line: Points making up the empirical ROC curve. Area Under Roc Curve: Area under fitted curve (A_z)= 0.9771 , Estimated std. error= 0.0483 , Trapezoidal (Wilcoxon) area= 0.9828 , Estimated std. error= 0.0649 .

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Ethical considerations

Ethical matters e.g. plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc. have been totally observed by the authors. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments including informed consent and confidentiality of all personal information.

Transparency document. Supplementary material

Transparency data associated with this article can be found in the online version at <http://dx.doi.org/10.1016/j.dib.2018.02.046>.

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