Supplementary material

Elexacaftor/tezacaftor/ivacaftor for cystic fibrosis: Impact on hospitalizations and healthcare resource utilization in a universal health care setting

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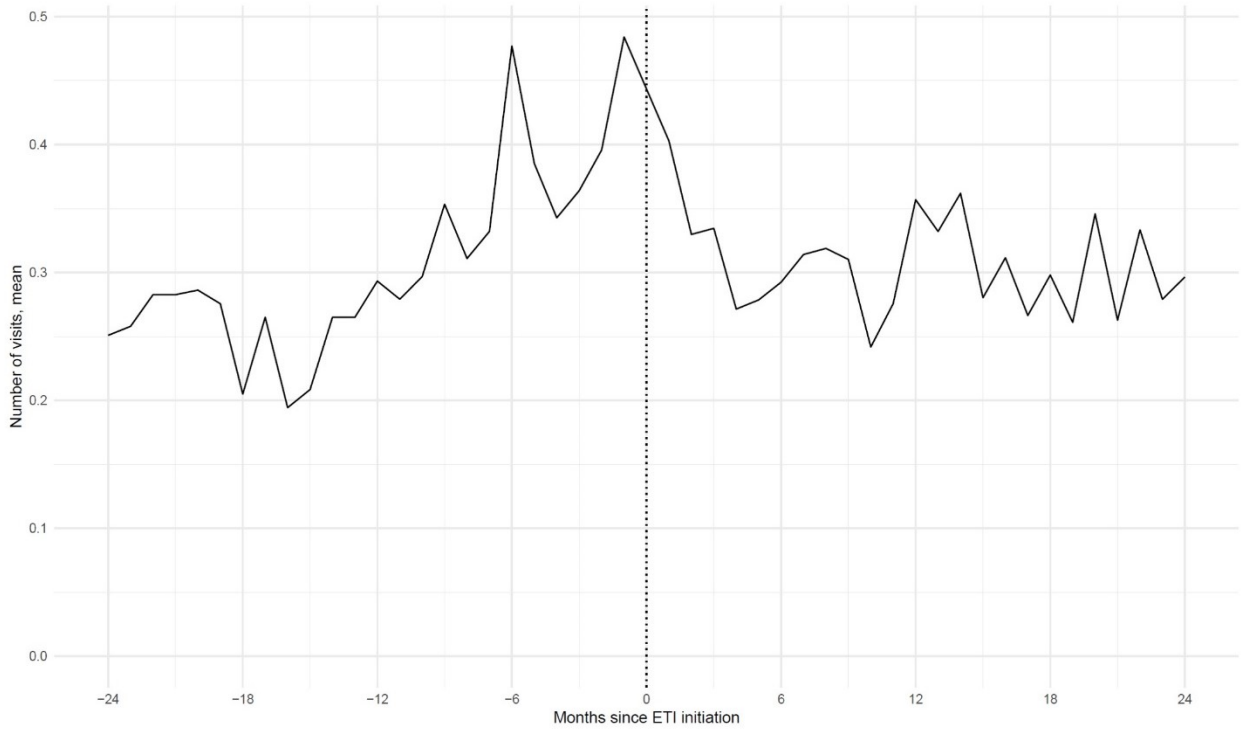
Supplementary figure 1. Unadjusted mean number of general practitioner visits in relation to initiation of elexacaftor/tezacaftor/ivacaftor (ETI)



Supplementary table 1. Change in healthcare resource utilization with ETI treatment without the assumption of zero trend prior to ETI treatment. Mean number of contacts per month and change in mean number of contacts per month expressed as a factor (95%CI) at 6, 12, 18, and 24 months post ETI treatment compared to predicted mean based on the trend prior to ETI treatment (Generalized Estimating Equations (GEE) linear regression analysis).

	1 month prior	6 months post vs. prior			12 months post vs. prior			18 months post vs. prior			24 months post vs. prior		
Healthcare resource utilization	Mean (95% CI)	Mean (95% CI)	Factor versus trend* (95% CI)	P-value	Mean (95% CI)	Factor versus trend* (95% CI)	P-value	Mean (95% CI)	Factor versus trend* (95% CI)	P-value	Mean (95% CI)	Factor versus trend* (95% CI)	P-value
Acute hospitalization	0.05 (0.03;0.07)	0.01 (0.01;0.03)	0.21 (0.07;0.66)	<0.01	0.03 (0.02;0.05)	0.39 (0.11;1.38)	0.14	0.02 (0.01;0.04)	0.26 (0.06;1.06)	0.06	0.03 (0.01;0.07)	0.26 (0.04;1.93)	0.19
Days of acute hospitalization	0.23 (0.14;0.39)	0.08 (0.03;0.18)	0.30 (0.08;1.04)	0.06	0.11 (0.05;0.25)	0.37 (0.09;1.55)	0.17	0.10 (0.06;0.19)	0.32 (0.06;1.61)	0.17	0.18 (0.06;0.54)	0.48 (0.06;3.92)	0.50
Elective hospitalization	0.05 (0.03;0.08)	0.01 (0.01;0.03)	0.24 (0.08;0.76)	0.02	0.01 (0.01;0.02)	0.15 (0.03;0.75)	0.02	0.01 (0.01;0.03)	0.16 (0.02;1.12)	0.06	0.01 (0.00;0.02)	0.08 (0.01;0.81)	0.03
Days of elective hospitalization	0.29 (0.18;0.47)	0.08 (0.04;0.16)	0.26 (0.10;0.67)	<0.01	0.10 (0.04;0.27)	0.28 (0.06;1.33)	0.11	0.11 (0.05;0.24)	0.28 (0.05;1.76)	0.18	0.05 (0.02;0.12)	0.11 (0.01;0.83)	0.03
Acute outpatient contact	0.05 (0.03;0.07)	0.02 (0.01;0.03)	0.44 (0.18;1.05)	0.06	0.02 (0.01;0.04)	0.49 (0.18;1.33)	0.16	0.02 (0.01;0.04)	0.47 (0.14;1.57)	0.22	0.04 (0.02;0.07)	0.74 (0.16;3.43)	0.70
Elective outpatient contact	1.24 (1.14;1.35)	0.77 (0.68;0.87)	0.52 (0.43;0.63)	<0.001	0.94 (0.82;1.07)	0.55 (0.44;0.70)	<0.001	0.87 (0.78;0.97)	0.44 (0.33;0.59)	<0.001	0.81 (0.70;0.93)	0.36 (0.25;0.51)	<0.001
General practitioner visit	0.39 (0.33;0.46)	0.28 (0.23;0.34)	0.60 (0.43;0.85)	<0.01	0.36 (0.30;0.43)	0.65 (0.42;1.01)	0.05	0.33 (0.27;0.39)	0.50 (0.28;0.89)	0.02	0.31 (0.25;0.39)	0.41 (0.21;0.80)	<0.01
Other healthcare specialist visit	0.08 (0.06;0.10)	0.03 (0.02;0.05)	0.23 (0.11;0.49)	<0.001	0.04 (0.03;0.06)	0.19 (0.07;0.48)	<0.001	0.03 (0.02;0.05)	0.09 (0.03;0.29)	<0.001	0.03 (0.02;0.05)	0.05 (0.01;0.23)	<0.001
Physiotherapy and chiropractic visit	0.11 (0.07;0.15)	0.08 (0.06;0.12)	0.64 (0.41;0.99)	0.05	0.06 (0.04;0.09)	0.43 (0.23;0.81)	<0.01	0.08 (0.05;0.12)	0.45 (0.21;0.97)	0.04	0.07 (0.04;0.10)	0.33 (0.13;0.85)	0.02
Pharmacy visit	1.47 (1.35;1.60)	0.97 (0.88;1.07)	0.61 (0.53;0.71)	<0.001	1.02 (0.93;1.12)	0.60 (0.50;0.73)	<0.001	1.06 (0.96;1.16)	0.59 (0.47;0.74)	<0.001	0.92 (0.83;1.03)	0.48 (0.36;0.64)	<0.001
Blood sampling date	1.29 (1.15;1.46)	0.49 (0.42;0.59)	0.20 (0.14;0.27)	<0.001	0.64 (0.54;0.75)	0.14 (0.10;0.22)	<0.001	0.43 (0.34;0.55)	0.06 (0.03;0.10)	<0.001	0.42 (0.32;0.55)	0.03 (0.02;0.06)	<0.001

Notes: *Factor (95% CI) change compared to predicted mean based on the trend prior to ETI treatment; Acute hospitalization is defined as an immediate and unplanned hospital encounter. Elective hospitalization is defined as a planned and scheduled hospital encounter. 95% CI: 95% confidence interval; ETI: elexacaftor/tezacaftor/ivacaftor. GEE linear regression model accounting for repeated measurements in the same individuals and including season and COVID-19 as covariates; the estimate is given for the mean effect of the covariates season and COVID-19. 24 months of follow-up available for 203 out of 283 individuals.