IQWiG Reports – Commission No. A18-43

Bictegravir/emtricitabine/ tenofovir alafenamide (HIV infection) –

Benefit assessment according to §35a Social Code Book V[1]

Extract

[1] Translation of the executive summary of the dossier assessment *Bictegravir/Emtricitabin/Tenofoviralafenamid (HIV-Infektion) – Nutzenbewertung gemäß § 35a SGB V* (Version 1.0; Status: 27 September 2018). Please note: This document was translated by an external translator and is provided as a service by IQWiG to English-language readers. However, solely the German original text is absolutely authoritative and legally binding.

Publishing details

Publisher:

Institute for Quality and Efficiency in Health Care

Topic:

Bictegravir/emtricitabine/tenofovir alafenamide (HIV infection) – Benefit assessment according to §35a Social Code Book V

Commissioning agency:

Federal Joint Committee

Commission awarded on:

28 June 2018

Internal Commission No.:

A18-43

Address of publisher:

Institut für Qualität und Wirtschaftlichkeit im Gesundheitswesen
Im Mediapark 8
50670 Köln
Germany

Phone: +49 221 35685-0
Fax: +49 221 35685-1
E-mail: berichte@iqwig.de
Internet: www.iqwig.de

Medical and scientific advice:

- Mark Oette, Augustinerinnen Hospital, Cologne, Germany

IQWiG thanks the medical and scientific advisor for his contribution to the dossier assessment. However, the advisor was not involved in the actual preparation of the dossier assessment. The responsibility for the contents of the dossier assessment lies solely with IQWiG.

IQWiG employees involved in the dossier assessment:

- Lisa Junge
- Anne Catharina Brockhaus
- Katharina Hirsch
- Thomas Kaiser
- Petra Kohlepp
- Vjollcë Olluri
- Min Ripoll
- Ulrike Seay
- Dorothea Sow

Keywords: bictegravir, emtricitabine, tenofovir alafenamide, HIV infections, benefit assessment, NCT02607930, NCT02607956, NCT02603120, NCT02603107, NCT02652624

Executive summary of the benefit assessment

Background

The Federal Joint Committee (G-BA) commissioned the Institute for Quality and Efficiency in Health Care (IQWiG) to assess the benefit of the drug combination bictegravir/emtricitabine/ tenofovir alafenamide (BIC/FTC/TAF). The assessment is based on a dossier compiled by the pharmaceutical company (hereinafter referred to as the "company"). The dossier was sent to IQWiG on 28 June 2018.

Research question

The aim of this report is to assess the added benefit of BIC/FTC/TAF in comparison with the appropriate comparator therapy (ACT) in adults infected with human immunodeficiency virus type 1 (HIV-1). The HIV virus must not have shown any evidence of past or current resistance to the class of integrase inhibitors, FTC, or tenofovir.

The G-BA's specification of the ACT results in 2 research questions, which are presented in Table 2 below.

Table 2[2]: Research questions of the benefit assessment of BIC/FTC/TAF

Research question	Indication	ACT[a]
1	Treatment-naïve adults infected with HIV-1[b]	Rilpivirine or **dolutegravir**, each in combination with 2 nucleoside/nucleotide analogues (**tenofovir** disoproxil/**alafenamide plus emtricitabine** or **abacavir plus lamivudine**)
2	Pretreated adults infected with HIV-1[b]	Individualized ART based on prior treatment(s) and under consideration of the reason for the switch of treatment, particularly treatment failure due to virologic failure and possible accompanying development of resistance, or due to adverse events

a: Presentation of the respective ACT specified by the G-BA. In cases where the ACT specified by the G-BA allows the company to choose a comparator therapy from several options, the respective choice by the company is printed in **bold**.
b: The HIV virus must show no evidence of past or current resistance to the class of integrase inhibitors, emtricitabine, or tenofovir.
ACT: appropriate comparator therapy; BIC: bictegravir; FTC: emtricitabine; G-BA: Federal Joint Committee; HIV-1: human immunodeficiency virus type 1; TAF: tenofovir alafenamide; ART: antiretroviral therapy

The company followed the G-BA's specification of the ACT for both research questions.

The assessment was conducted by means of patient-relevant outcomes on the basis of the data provided by the company in the dossier. Randomized controlled trials (RCTs) with a minimum duration of 48 weeks were used to derive any added benefit.

[2] Table numbers start with "2" as numbering follows that of the full dossier assessment.

Results for research question 1 (treatment-naïve adults)

Study pool and study characteristics

The study pool for the benefit assessment of BIC/FTC/TAF in treatment-naïve HIV-1-infected adults consists of the studies GS-US-380-1489 and GS-US-380-1490 (hereinafter referred to as 1489 and 1490).

The 1489 and 1490 studies are double-blind, randomized, parallel-group studies on treatment-naïve HIV-1-infected adults. BIC/FTC/TAF was compared with the fixed-dose combination of abacavir, dolutegravir, and lamivudine (ABC/DTG/3TC) in the 1489 study, and with DTG + FTC/TAF in the 1490 study.

In the 1489 study, a total of 631 patients were randomly allocated to treatment with BIC/FTC/TAF (N=316) or ABC/DTG/3TC (N = 315). In the 1490 study, a total of 657 patients were randomly allocated to treatment with BIC/FTC/TAF (N = 327) or a combination treatment consisting of DTG + FTC/TAF (N = 330).

Both studies are ongoing. The randomized treatment duration is 144 weeks for each study. The assessment is based on the data cut-off date of the Week 48 analysis.

Where meaningful, the results of the two studies were combined in a metaanalysis. The heterogeneity between studies which was observed for some outcomes will be addressed both on the level of the specific outcomes and overall at the end of the results section.

Risk of bias

The risk of bias at study level was rated as low for both 1489 and 1490. The risk of bias for the selected outcomes in both studies was rated as low, except for symptoms (as measured by the HIV symptom index [HIV-SI]) and health-related quality of life (as measured by the Short Form 36 – Version 2 Health Survey [SF-36v2]) in study 1490.

Mortality

All-cause mortality

Up to Week 48, no deaths occurred in the 1489 study. In the 1490 study, 1 patient died in the BIC/FTC/TAF arm and 2 patients in the DTG + FTC/TAF arm. No statistically significant difference between treatment groups was found. This results in no hint of added benefit of BIC/FTC/TAF in comparison with ABC/DTG/3TC or DTG + FTC/TAF; an added benefit is therefore not proven.

Morbidity

Acquired immunodeficiency syndrome (AIDS)-defining events (Centers of Disease Control and Prevention [CDC] Category C), supplementary consideration of the surrogate outcomes virologic response, virologic failure, and Cluster-of-Differentiation-4 (CD4) cell count

The metaanalysis shows no statistically significant difference between treatment arms for the outcome AIDS-defining events of CDC Category C or the two supplementary outcomes virologic response and $CD4^+$ cell count.

For the supplementary outcome of virologic failure, the two studies are heterogeneous ($p < 0.05$) with different directions of effects. Due to this heterogeneity, generating a pooled common effect estimate for the studies is not meaningful for this outcome. In the 1489 study, no statistically significant difference between BIC/FTC/TAF and ABC/DTG/3TC was found for the outcome of virologic failure. In the 1490 study, a statistically significant difference was found to the disadvantage of BIC/FTC/TAF in comparison with DTG + FTC/TAF.

For the outcome of AIDS-defining events, there is overall no hint of added benefit of BIC/FTC/TAF in comparison with ABC/DTG/3TC or DTG + FTC/TAF; an added benefit is therefore not proven.

Patient-reported symptoms: HIV-SI

For the outcome of HIV-SI, the mean change in Symptom Bother Score from the start of the study to Week 48 was calculated for each of the 20 individual items. The company did not present any analyses on the overall index (Symptom Bother Score). The metaanalysis shows no statistically significant difference between treatment groups for any of the individual items.

For this outcome, there is consequently no hint of added benefit of BIC/FTC/TAF in comparison with ABC/DTG/3TC or DTG + FTC/TAF; an added benefit is therefore not proven.

Health-related quality of life

SF-36v2 – Physical Component Score (PCS)

For the PCS of SF-36v2, the metaanalysis of the mean change from the start of the study to Week 48 shows no statistically significant difference between treatment groups. For the PCS of SF-36v2, there is consequently no hint of added benefit of BIC/FTC/TAF in comparison with ABC/DTG/3TC or DTG + FTC/TAF; an added benefit is therefore not proven.

SF-36v2 – Mental Component Score (MCS)

For the MCS of SF-36v2, the mean change from the start of the study to Week 48 was looked at. For this outcome, the two studies are heterogeneous ($p< 0.05$) with different directions of effects. Due to this heterogeneity, generating a pooled common effect estimate for the studies is not meaningful for this outcome.

No statistically significant difference between treatment groups was found in either the 1489 or 1490 study. For the MCS of SF-36v2, there is consequently no hint of added benefit of

BIC/FTC/TAF in comparison with ABC/DTG/3TC or DTG + FTC/TAF; an added benefit is therefore not proven.

Adverse events

Serious adverse events (SAEs)

For the outcome SAEs, the 1489 and 1490 studies are heterogeneous ($p < 0.05$) with different directions of effects. Due to this heterogeneity, generating a pooled common effect estimate for the studies is not meaningful for this outcome.

In the 1489 study, no statistically significant difference between treatment groups was found. In the 1490 study, a statistically significant difference to the disadvantage of BIC/ FTC/TAF was found. Due to the different directions of effects, the overall analysis of the two studies regarding this outcome reveals no hint of greater or lesser harm of BIC/FTC/TAF in comparison with ABC/DTG/3TC or DTG + FTC/TAF; consequently, there is no proof of greater or lesser harm for this outcome.

Severe AEs ("Gilead Sciences Grading Scale for Severity of Adverse Events and Laboratory Abnormalities" grades 3–4)

For the outcome of severe AEs (grades 3–4), the metaanalysis shows no statistically significant difference between treatment groups. For this outcome, there is therefore no hint of greater or lesser harm of BIC/FTC/TAF in comparison with ABC/DTG/3TC or DTG + FTC/TAF; consequently, there is no proof of greater or lesser harm for this outcome.

Discontinuation due to AEs

For the outcome discontinuation due to AEs, the 1489 and 1490 studies are heterogeneous ($p < 0.05$) with different directions of effects. Due to this heterogeneity, generating a pooled common effect estimate for the studies is not meaningful for this outcome.

In the 1489 study, a statistically significant difference in favour of BIC/ FTC/TAF was found. In the 1490 study, no statistically significant difference between treatment groups was found. Due to the different directions of effects, the overall analysis of the two studies on this outcome reveals no hint of greater or lesser harm of BIC/FTC/TAF in comparison with ABC/DTG/3TC or DTG + FTC/TAF; consequently, there is no proof of greater or lesser harm for this outcome.

Specific AEs

Gastrointestinal disorders, including: nausea

For the outcome of gastrointestinal disorders, the metaanalysis shows a statistically significant difference in favour of BIC/ FTC/TAF. However, the effect is no more than marginal. The effect is largely based on the preferred term (PT) nausea within the SOC Gastrointestinal Disorders. For the PT nausea, the 1489 and 1490 studies are heterogeneous ($p < 0.05$) with different directions of effects. Due to heterogeneity for the PT nausea, a pooled common effect estimate of the studies cannot be meaningfully formed for this outcome. For the PT nausea, the

1489 study shows a statistically significant difference in favour of BIC/FTC/TAF. The 1490 study revealed no statistically significant difference between treatment groups.

Altogether, for the outcome gastrointestinal disorders with the PT nausea, there is no hint of greater or lesser harm of BIC/FTC/TAF in comparison with ABC/DTG/3TC or DTG + FTC/TAF; consequently, there is no proof of greater or lesser harm.

Skin and subcutaneous tissue disorders, nervous system disorders, urinary tract infection, and psychiatric disorders

For any of the specific AEs skin and subcutaneous tissue disorders, nervous system disorders, urinary tract infection, and psychiatric disorders, the metaanalysis shows no statistically significant difference between treatment groups. For any of these outcomes, there is therefore no hint of greater or lesser harm of BIC/FTC/TAF in comparison with ABC/DTG/3TC or DTG + FTC/TAF; consequently, there is no proof of greater or lesser harm for these outcomes.

Summary assessment of outcomes with between-study heterogeneity of results

The results of the 1489 and 1490 studies are heterogeneous for the outcomes SAEs, discontinuation due to AEs, and nausea (in the SOC Gastrointestinal Disorders) and for the supplementary outcome of virologic failure. Advantages of BIC/FTC/TAF regarding the outcomes of discontinuation due to AEs and nausea in the 1489 study are offset by the disadvantages of BIC/FTC/TAF regarding the outcome SAEs and the supplementary outcome of virologic failure in the 1490 study.

The between-study heterogeneity of results may potentially be due to the different backbone therapies (1489 study: ABC/3TC; 1490 study: FTC/TAF). However, the summary assessment of both studies reveals no clear advantages or disadvantages for BIC/FTC/TAF in comparison with ABC/DTG/3TC or DTG + FTC/TAF; therefore, no separate conclusions were drawn for each backbone therapy.

Results for research question 2 (pre-treated adults)

Study pool and study characteristics

The study pool for the benefit assessment of BIC/FTC/TAF in pre-treated HIV-1-infected adults consists of the studies 1844, 1878, and 1961.

The 1844, 1878, and 1961 studies are randomized parallel-group studies on ART-pretreated, virologically suppressed HIV-1-infected adults (HIV-1-RNA viral load < 50 copies/mL). In each of the studies, BIC/FTC/TAF were compared with continuation of the prior treatment.

A total of 567 patients in the 1844 study, 578 patients in the 1878 study, and 472 patients in the 1961 study were randomly allocated to the study arms BIC/FTC/TAF (1844: N = 284; 1878: N = 290; 1961: N = 235) and continuation of prior treatment (1844: N = 283; 1878: N = 288; 1961: N = 237).

Since most of the patients in all 3 studies had no indication for a treatment switch, the studies are relevant only for the subpopulation of patients for whom a treatment switch is not indicated. For patients for whom a treatment switch is indicated, no relevant studies are available.

The assessment is based on the data cut-off of the Week 48 analysis for the 3 studies. In all 3 studies, this corresponds to the end of the randomized treatment phase.

If meaningful, the results of the 3 studies were combined in a metaanalysis. The between-study heterogeneity observed in some outcomes has been addressed both for each specific outcome and in summary at the end of the description of results.

Risk of bias

The risk of bias at study level is assessed as low for all 3 studies. In the 1844 study, a low risk of bias is assumed for all considered outcomes. In the 1878 and 1961 studies, the risk of bias is also rated as low for the outcomes of all-cause mortality, AIDS-defining events (CDC Category C), virologic response, virologic failure, CD4 cell count, SAEs, and severe AEs (grades 3–4). For the other outcomes considered in the 1878 and 1961 studies, the risk of bias is rated as high, i.e. symptoms (HIV-SI, only in the 1878 study), health-related quality of life (SF-36v2, only in the 1878 study), discontinuation due to AEs, as well as specific AEs.

Mortality

All-cause mortality

For the outcome of all-cause mortality, the metaanalysis does not show a statistically significant difference between treatment groups. For this outcome, this resulted in no hint of an added benefit of BIC/FTC/TAF in comparison with continuation of the prior treatment; an added benefit is therefore not proven.

Morbidity

AIDS-defining events (CDC Category C), supplementary consideration of the surrogate outcomes virologic response, virologic failure, and CD4$^+$ cell count

In the 1844, 1878, and 1961 studies, no AIDS-defining event of CDC Category C occurred. The metaanalysis shows no statistically significant difference between treatment groups for any of the additionally measured outcomes of virologic response and virologic failure.

For the supplementary outcome CD4 cell count, the 3 studies are heterogeneous ($p< 0.05$) with different directions of effects. Due to this heterogeneity, generating a pooled common effect estimate for the studies is not meaningful for this outcome. No statistically significant difference between treatment groups was found in any of the 1844, 1878, and 1961 studies.

For the outcome of AIDS-defining events, overall, this resulted in no hint of an added benefit of BIC/FTC/TAF in comparison with continuation of the prior treatment; an added benefit is therefore not proven.

Patient-reported symptoms: HIV-SI

For the outcome of HIV-SI, the mean change in Symptom Bother Score from the start of the study to Week 48 was calculated for each of the 20 individual items. The company did not present any analyses on the overall index (Symptom Bother Score). The metaanalysis of the 1844 and 1878 studies showed no statistically significant difference between treatment groups for any of the individual items. In study 1961, HIV-SI was not investigated. For this outcome, there is therefore no hint of an added benefit of BIC/FTC/TAF in comparison with continuation of the prior treatment; an added benefit is therefore not proven.

Health-related quality of life

SF-36v2 – Physical Component Score (PCS)

For the mean change of the PCS of SF-36v2 from the start of the study to Week 48, the metaanalysis of studies 1844 and 1878 shows a statistically significant difference in favour of BIC/FTC/TAF in comparison with continuation of the prior treatment. The 95% confidence interval (CI) of the standardized mean difference (Hedges g) is, however, not fully outside of the irrelevance range of −0.2 to 0.2. Hence, the effect cannot be rated as relevant. In the 1961 study, the PCS was not surveyed. For the PCS of SF-36v2, this resulted in no hint of an added benefit of BIC/FTC/TAF in comparison with continuation of the prior treatment; an added benefit is therefore not proven.

SF-36v2 – Mental Component Score (MCS)

For the MCS of SF-36v2, the metaanalysis of the 1844 and 1878 studies regarding the mean change from the start of the study to Week 48 shows no statistically significant difference between treatment groups. In the 1961 study, the MCS was not surveyed. For the MCS of SF-36v2, this resulted in no hint of an added benefit of BIC/FTC/TAF in comparison with continuation of the prior treatment; an added benefit is therefore not proven.

Side effects

SAEs, severe AEs ("Gilead Sciences Grading Scale for Severity of Adverse Events and Laboratory Abnormalities" grades 3–4), and discontinuation due to AEs

For the outcomes SAEs, severe AEs (grades 3–4), and discontinuation due to AEs, the metaanalysis shows no statistically significant difference between treatment groups. There is therefore no hint of greater or lesser harm of BIC/FTC/TAF in comparison with continuation of the prior treatment for any of these outcomes; consequently, there is no proof of greater or lesser harm for these outcomes.

Specific AEs

Gastrointestinal disorders

For the outcome gastrointestinal disorders, the metaanalysis shows a statistically significant difference in favour of BIC/DTG/TAF. However, the effect is no more than minor. For that outcome, there is therefore no hint of greater or lesser harm of BIC/FTC/TAF in comparison with continuation of the prior treatment; consequently, there is no proof of greater or lesser harm.

Diseases of the skin and subcutaneous tissue

For the outcome skin and subcutaneous tissue disorders, the metaanalysis shows no statistically significant difference between treatment groups. For this outcome, there is therefore no hint of greater or lesser harm of BIC/FTC/TAF in comparison with continuation of the prior treatment; consequently, there is no proof of greater or lesser harm.

Nervous system disorders

For the outcome psychiatric disorders of the nervous system, the 1844, 1878, and 1961 studies are heterogeneous ($p< 0.05$) with different directions of effects. Due to this heterogeneity, generating a pooled common effect estimate for the studies is not meaningful for this outcome.

In the 1844 and 1961 studies, no statistically significant difference between treatment groups was found. In the 1878 study, a statistically significant difference to the disadvantage of BIC/FTC/TAF was found. Since the effects are not in the same direction, greater or lesser harm is not derived for this outcome in the overall consideration of all studies. For this outcome, there is therefore no hint of greater or lesser harm of BIC/FTC/TAF in comparison with continuation of the prior treatment; consequently, there is no proof of greater or lesser harm for this outcome.

Urinary tract infection

For the outcome of urinary tract infection, the metaanalysis shows a statistically significant difference to the disadvantage of BIC/FTC/TAF. For this outcome, there is proof of effect modification by the attribute of sex. For women, this results in an indication of greater harm of BIC/FTC/TAF in comparison with continuation of the prior treatment. For men, there is no hint of greater or lesser harm of BIC/FTC/TAF in comparison with continuation of the prior treatment; consequently, there is no proof of greater or lesser harm.

Psychiatric disorders

For the outcome of psychiatric disorders, the 1844, 1878 and 1961 studies are heterogeneous ($p < 0.05$) with different directions of effects. Due to this heterogeneity, generating a pooled common effect estimate for the studies is not meaningful for this outcome.

In the 1844 study, a statistically significant difference in favour of BIC/ FTC/TAF was found. In each of the 1878 and 1961 studies, a statistically significant difference to the disadvantage of BIC/FTC/TAF was found. Since the effects are not in the same direction, greater or lesser harm is not derived for this outcome in the overall consideration of all studies. For this outcome, there is therefore no hint of greater or lesser harm of BIC/FTC/TAF in comparison with continuation of the prior treatment; consequently, there is no proof of greater or lesser harm for this outcome.

Overall consideration of outcomes with between-study heterogeneity of results

The 1844, 1878, and 1961 studies show heterogeneous results for the outcomes of nervous system disorders and psychiatric disorders. For the outcome of nervous system disorders, there

is a disadvantage of BIC/FTC/TAF in study 1878. For the outcome psychiatric disorders, an advantage of BIC/FTC/TAF in the 1844 study is offset by a disadvantage of BIC/FTC/TAF in the 1878 and 1961 studies.

This between-study heterogeneity of results could potentially be caused by the different comparator therapies. However, the overall consideration of the 3 studies revealed no clear advantages or disadvantages of BIC/FTC/TAF in comparison to the respective comparator therapy; therefore, the studies will continue to be viewed together.

Probability and extent of added benefit, patient groups with therapeutically important added benefit[3]

On the basis of the presented results, the probability and extent of added benefit of the drug combination BIC/FTC/TAF in comparison with the ACT is assessed as follows for each research question:

Research question 1 (treatment-naïve adults)

Overall, neither positive nor negative effects are found for BIC/FTC/TAF in comparison with ABC/DTG/3TC or DTG + FTC/TAF.

In summary, for treatment-naïve HIV-1-infected[4] adults, there is no hint of added benefit of BIC/FTC/TAF in comparison with ABC/DTG/3TC or DTG + FTC/TAF; an added benefit is therefore not proven.

Research question 2 (pre-treated adults)

In terms of negative effects, the overall picture reveals, for women only, an indication of greater harm of a considerable extent for BIC/FTC/TAF in comparison with continuation of the prior treatment.

In summary, for pre-treated HIV-1-infected women for in whom a treatment switch is not indicated, there is an indication of lesser benefit. For pre-treated HIV-1-infected men for whom a treatment switch is not indicated, there is no hint of added benefit; an added benefit is therefore not proven.

[3] On the basis of the scientific data analysed, IQWiG draws conclusions on the (added) benefit or harm of an intervention for each patient-relevant outcome. Depending on the number of studies analysed, the certainty of their results, and the direction and statistical significance of treatment effects, conclusions on the probability of (added) benefit or harm are graded into 4 categories: (1) “proof”, (2) “indication”, (3) “hint”, or (4) none of the first 3 categories applies (i.e., no data available or conclusions 1 to 3 cannot be drawn from the available data). The extent of added benefit or harm is graded into 3 categories: (1) major, (2) considerable, (3) minor (in addition, 3 further categories may apply: non-quantifiable extent of added benefit, added benefit not proven, or less benefit). For further details see [1,2].

[4] The HIV virus must not have demonstrated any evidence of current or past resistances against the class of integrase inhibitors, emtricitabine, or tenofovir.

No data are available for assessing an added benefit for pre-treated HIV-1-infected adults with indication for a treatment switch. For this population, there is no hint of added benefit; an added benefit is therefore not proven.

Summary

Table 3 presents a summary of the probability and extent of the added benefit of BIC/FTC/TAF.

Table 3: BIC/FTC/TAF – probability and extent of added benefit

Research question	**Indication**	**ACT[a]**	**Probability and extent of added benefit**
1	Treatment-naïve adults infected with HIV-1[b]	Rilpivirine or **dolutegravir**, each in combination with 2 nucleoside/nucleotide analogues (**tenofovir** disoproxil/**alafenamide plus emtricitabine** or **abacavir plus lamivudine**)	Added benefit not proven
2	Pre-treated adults infected with HIV-1[b]	Individualized ART based on prior treatment(s) and under consideration of the reason for the switch of treatment, particularly treatment failure due to virologic failure and possible accompanying development of resistance or due to adverse events	
	For whom a treatment switch is indicated		Added benefit not proven
	For whom a treatment switch is not indicated		▪ Women: Indication of lesser benefit ▪ Men: Added benefit not proven

a: Presentation of the respective ACT specified by the G-BA. In cases where the ACT specified by the G-BA allows the company to choose a comparator therapy from several options, the respective choice by the company is printed in **bold**.
b: The HI virus must not currently exhibit or have exhibited in the past any resistances against the class of integrase inhibitors, emtricitabine, or tenofovir.
ACT: appropriate comparator therapy; ART: antiretroviral therapy; BIC: bictegravir; FTC: emtricitabine; G-BA: Federal Joint Committee; HIV-1: human immunodeficiency virus type 1; TAF: tenofovir alafenamide

The approach for deriving the overall conclusion on added benefit is a suggestion from IQWiG. The G-BA decides on the added benefit.

Note:

An addendum (A18-77) to dossier assessment A18-43 has been published.

References for English extract

Please see full dossier assessment for full reference list.

1. Institute for Quality and Efficiency in Health Care. General methods: version 5.0 [online]. 10 July 2017 [Accessed: 4 June 2018]. URL: https://www.iqwig.de/download/General-Methods_Version-5-0.pdf.

2. Skipka G, Wieseler B, Kaiser T, Thomas S, Bender R, Windeler J et al. Methodological approach to determine minor, considerable, and major treatment effects in the early benefit assessment of new drugs. Biom J 2015; 58(1): 43-58

The full report (German version) is published under https://www.iqwig.de/en/projects-results/projects/drug-assessment/a18-43-bictegravir-emtricitabine-tenofovir-alafenamide-hiv-infection-benefit-assessment-according-to-35a-social-code-book-v.10107.html.