



Correction

Correction: Wist et al. Phenotypic and Genotypic Traits of Vancomycin-Resistant Enterococci from Healthy Food-Producing Animals. *Microorganisms* 2020, 8, 261

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The authors wish to make the following correction to this paper [1].

After the publication of the manuscript, the authors recognized a discrepancy due to a nucleotide numbering difference between the prototype Tn1546 (M97297) and the Tn1546 elements sequenced in this study. Therefore, a point mutation within the *vanX* gene of six Tn1546 elements described in this study was mistakenly reported.

We changed Table 1 and Figures 1 and 2 and present the correct versions here.

The authors wish to point out the following:

The abstract should read: “two different types of Tn1546-like elements carrying the *vanA* operon were identified”.

The results Section 3.4. should read: “Analysis of the Tn1546 structures distinguished two different Tn1546-like types I and II, respectively (Table 1).

The structure of the *van* operon in type I was identical to the *van* operon prototype described previously (GenBank M97297) and included six *E. durans* isolates from poultry, the *E. faecalis* isolate from cattle and *E. faecium* from pigs (Table 1). The Tn1546-like type I elements detected in *E. durans* contained a topoisomerase gene downstream of *vanZ*, placing them in a highly similar but distinct cluster to the *E. faecalis* Tn1546 (Figure 1).

The Tn1546-like type I elements identified in *E. faecium* from poultry contained an *aadK* gene downstream of *vanZ*, whereas those found in pigs carried *merA*. Examples of the Tn1546-like elements are shown in Figure 2.

Finally, type II Tn1546 was identical to the type I structure, but disrupted by IS1252 in the *orf2-vanR* intergenic region. Type II elements were detected in four *E. durans* isolates from poultry and carried a topoisomerase gene located downstream of *vanZ* (Figure 2)”.

The discussion should read: “The majority corresponded to the prototype Tn1546, which has been found in enterococcal isolates from healthy and hospitalised humans, in pig isolates, in food isolates, and in environmental enterococci [53–56]”.

The authors would like to apologize for any inconvenience caused to the readers by these changes.

Table 1. Phenotypic and genotypic features of vancomycin-resistant *Enterococcus* spp. isolated from cattle, pigs, and poultry. Changed information is highlighted in grey.

Host/Species	No. of Strains	Resistance Phenotype		Resistance Genotype		MLST
		MIC [$\mu\text{g/mL}$] Vancomycin	Additional Resistances	Resistance Genes	Tn1546 Type	
Cattle						
<i>E. faecalis</i>	1	≥ 128	–	<i>dfrE, emeA, efrA, efrB, lsaA, vanA</i>	I	29
Pigs						
<i>E. faecium</i>	1	≥ 256	PEN, ERY, TE	<i>aac(6′)-Ii, eat(A)_v, cadA, cadC, copZ, czrA, merA, merR, tetW/N/W, vanA, zosA</i>	I	133
<i>E. faecium</i>	5	≥ 256	PEN, TE	<i>aac(6′)-Ii, eat(A)_v, cadA, cadC, copZ, czrA, merA, merR, tetW/N/W, vanA, zosA</i>	I	133
Poultry						
<i>E. faecium</i>	1	≥ 256	ERY	<i>aac(6′)-Ii, aadK, eat(A)_v, vanA</i>	I	13
<i>E. faecium</i>	1	≥ 256	PEN	<i>aac(6′)-Ii, aadK, eat(A)_v, vanA</i>	I	157
<i>E. faecium</i>	1	≥ 256	–	<i>aac(6′)-Ii, aadK, eat(A)_v, vanA</i>	I	157
<i>E. faecium</i>	3	≥ 256	ERY	<i>aac(6′)-Ii, aadK, eat(A)_v, vanA</i>	I	310
<i>E. durans</i>	1	≥ 256	TE	<i>aac(6′)-Iid, tetW/N/W, vanA</i>	I	–
<i>E. durans</i>	2	≥ 256	ERY, TE	<i>aac(6′)-Iid, ermB, vanA</i>	I	–
<i>E. durans</i>	1	256	ERY, TE	<i>aac(6′)-Iid, ermB tetW/N/W, vanA</i>	I	–
<i>E. durans</i>	1	≥ 256	TE	<i>aac(6′)-Iid, ermB, tetW/N/W, vanA</i>	I	–
<i>E. durans</i>	1	≥ 256	ERY, TE	<i>aac(6′)-Iid, ermB tetW/N/W, vanA</i>	I	–
<i>E. durans</i>	3	≥ 256	ERY, TE	<i>aac(6′)-Iid, ermB tetW/N/W, vanA</i>	II	–
<i>E. durans</i>	1	≥ 256	TE	<i>aac(6′)-Iid, tetW/N/W, vanA</i>	II	–

Abbreviations: *aac(6′)-Ii* and *aac(6′)-Iid*: genes for aminoglycoside N-acetyltransferases; *aadK*, aminoglycoside 6-adenylyl-transferase; *cadA*, *cadC*, cadmium resistance genes; *cop*, copper resistance gene; *czrA*, metal transport repressor gene; *dfrE*, dihydrofolate reductase gene; *eat(A)_v*, allelic variant of *eat(A)* gene for resistance to lincosamides, streptogramins A, and pleuromutilins (LSAP); *emeA*, enterococcal multidrug resistance efflux gene; *efrA*, *efrB*, ABC multidrug efflux pump genes; *ermB*, gene for 23S ribosomal RNA methyl-transferase; ERY: erythromycin; *lsaA*, active efflux ABC transporter gene for intrinsic LSAP resistance; *merA*, *merR*, mercury resistance genes; MIC, minimal inhibitory concentration; MLST, multilocus sequence type; PEN: penicillin; TET: tetracycline; *tetW/N/W*, mosaic tetracycline resistance gene and ribosomal protection protein; *vanA*, vancomycin resistance gene; *zosA*, zinc transporter gene.

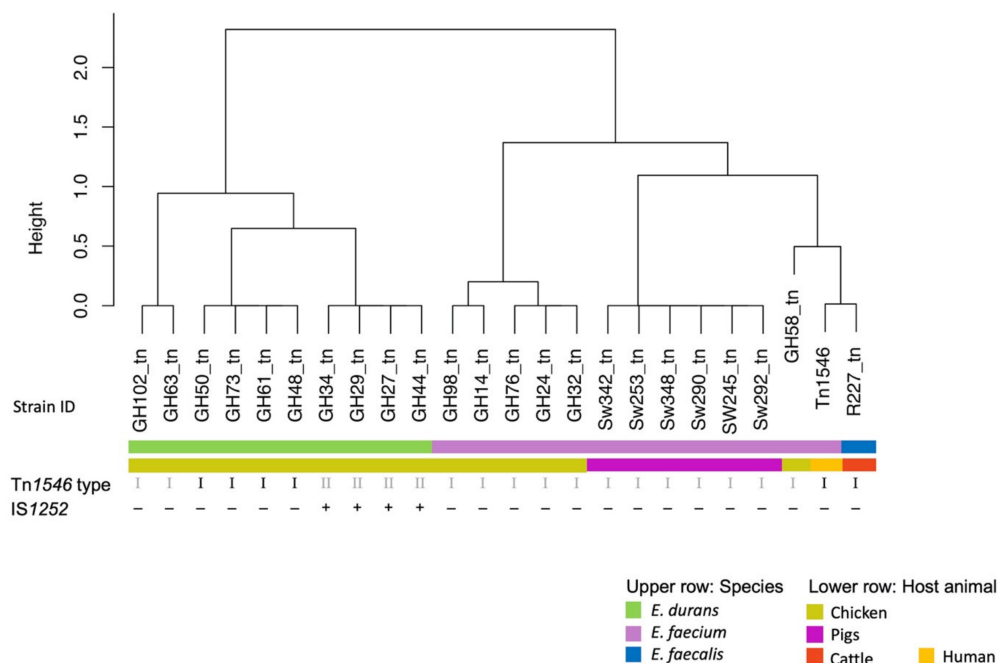


Figure 1. Average nucleotide identity (ANI) based cluster dendrogram showing three types of Tn1546-like elements carrying *vanA* operons identified in 23 *vanA*-type vancomycin-resistant enterococci from healthy food-producing animals. Type I corresponds to the prototype Tn1546 (GenBank M97297) from human *E. faecium* B4147 [35]. Type II additionally carries an IS1252 in the *orf2-vanR* intergenic region. Changed information is highlighted in grey.

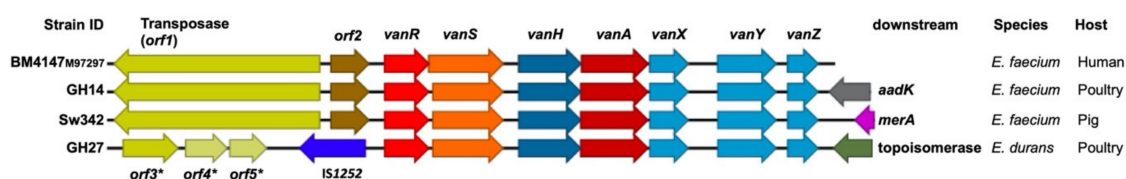


Figure 2. Linear maps of *vanA* encoding regions of the prototype Tn1546 (GenBank M97297) from human *E. faecium* B4147 [35], and of vancomycin-resistant enterococci from healthy food-producing animals. *aadK*, aminoglycoside 6-adenylyltransferase; *merA*, mercury resistance gene; *, putative open reading frames.

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Reference

1. Wist, V.; Morach, M.; Schneeberger, M.; Cernela, N.; Stevens, M.J.A.; Zurfluh, K.; Stephan, R.; Nüesch-Inderbilen, M. Phenotypic and genotypic traits of vancomycin-resistant enterococci from healthy food-producing animals. *Microorganisms* **2020**, *8*, 261. [[CrossRef](#)]