Accepted Manuscript

Title: Antimicrobial resistances and virulence markers in Methicillin-resistant *Staphylococcus aureus* from broiler and

turkey: A molecular view from farm to fork

Author: Britta Kraushaar Britta Ballhausen Daniel Leeser Bernd-Alois Tenhagen Annemarie Käsbohrer Alexandra

Fetsch

PII: S0378-1135(16)30144-4

DOI: http://dx.doi.org/doi:10.1016/j.vetmic.2016.05.022

Reference: VETMIC 7312

To appear in: *VETMIC*

Received date: 15-1-2016 Revised date: 27-5-2016 Accepted date: 30-5-2016

Please cite this article as: {http://dx.doi.org/

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



ACCEPTED MANUSCRIPT

Table 1 Antimicrobial susceptibility of MRSA isolated from the turkey and broiler food production chain. Susceptibility phenotypes of MRSA isolated at primary production, at slaughter and at retail were determined by broth microdilution and using epidemiological cut-off values according to EUCAST. Table fields in black indicate a non-wild type phenotype and blank fields a wild type phenotype.

			Stage of the production chain					
	Total		Primary production		At slaughter		At retail	
	Turkey	Broiler	Turkey	Broiler	Turkey	Broiler	Turkey	Broiler
Isolates tested	(n=88)	(n=68)	(n=29)	(n=5)	(n=30)	(n=32)	(n=29)	(n=31)
Positive	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)
Isolates	70 (II)	/0 (II)	70 (11)	/0 (II)	/0 (II)	70 (II)	/0 (II)	/0 (II)
Beta-Lactam Re	sistance	•	-	l	· ·	I	•	•
Penicillin	100 (88)	100 (68)	100 (29)	100 (5)	100 (30)	100 (32)	100 (29)	100 (31)
Cefoxitin	100 (88)	100 (68)	100 (29)	100 (5)	100 (30)	100 (32)	100(29)	100 (31)
Aminoglycoside	Resistance				1	'		
Gentamicin	26.1 (23)	2.9(2)	10.3 (3)		33.3 (10)	3.1 (1)	34.5 (10)	3.2 (1)
Kanamycin	46.6 (41)	22.1 (15)	41.4 (12)	40.0 (2)	46.7 (14)	15.6 (5)	51.7 (15)	25.8 (8)
Streptomycin	23.9 (21)	27.9 (19)	20.7 (6)	40.0 (2)	23.3 (7)	28.1 (9)	27.6 (8)	25.8 (8)
MLS group*								
Erythromycin	78.4 (69)	85.3 (58)	79.3 (23)	60.0 (3)	70.0 (21)	93.8 (30)	86.2 (25)	80.6 (25)
Clindamycin	84.1 (74)	88.2 (60)	93.1 (27)	100 (5)	70.0 (21)	93.8 (30)	89.7 (26)	80.6 (25)
Quinopristin/	67.0 (59)	80.9 (55)	69.0 (20)	80.0 (4)	66.7 (20)	90.6 (29)	65.5 (19)	71.0 (22)
dalfopristin	07.0 (39)	80.9 (33)	09.0 (20)	80.0 (4)	00.7 (20)	90.0 (29)	03.3 (19)	71.0 (22)
Other resistance	es				1	'		
Chlorampheni	8 (7)	2.9 (2)	6.9 (2)	20 (1)	6.7 (2)	3.1 (1)	10.3 (3)	
col	0 (1)	2.7 (2)	0.7 (2)	20 (1)	0.7 (2)	5.1 (1)	10.5 (5)	
Ciprofloxacin	51.1 (45)	39.7 (27)	51.7 (15)	20.0 (1)	50 (15)	46.9 (15)	51.7 (15)	35.5 (11)
Fusidate	1.1 (1)	2.9(2)	3.4 (1)	20.0(1)				3.2 (1)
Linezolid					_			
Mupirocin	2.3 (2)				3.3 (1)	_	3.4 (1)	
Rifampicin	2.3 (2)		3.4 (1)			-	3.4 (1)	
Sulphamethox	4.5 (4)	1.5 (1)	3.4 (1)		3.3 (1)	Ī	6.9 (2)	3.2 (1)
azole	4.5 (4)	1.5 (1)	3. 4 (1)		3.3 (1)		0.9 (2)	3.2 (1)
Tetracycline	96.6 (85)	91.2 (62)	93.1 (27)	100 (5)	96.7 (29)	87.5 (28)	100 (29)	93.5 (29)

Download English Version:

https://daneshyari.com/en/article/5545360

Download Persian Version:

https://daneshyari.com/article/5545360

<u>Daneshyari.com</u>