

**Table A1 - *B. cenocepacia* ST32 isolates from patients not experiencing CS used in this study.** Isolates were recovered from sputum sample.

	Isolate #						
	Patient	1	2	3	4	5	6
<b>Patients not experiencing cepacia syndrome</b>	I	4/2002	11/2004	9/2008	11/2009	1/2014	
	J	10/2008	3/2010	4/2011	4/2013	5/2014	
	K	9/2007	8/2011	8/2013	6/2014		
	L	9/2005	9/2010	11/2011	5/2013	10/2014	
	M	2/2005	10/2006	3/2008	2/2010	6/2012	11/2014
	N	2/2006	2/2008	1/2010	3/2011	11/2011	7/2014
	O	4/2005	8/2007	11/2009	1/2011	3/2012	10/2013
	P	1/2004	3/2005	5/2007	2/2010	8/2013	7/2014
	Q	1/2004	2/2006	3/2008	9/2011	8/2013	5/2014
	R	4/2010	9/2011	7/2013	7/2014		
	S	2/2010	8/2011	1/2013	5/2014		
	T	11/2006	5/2007	10/2009	10/2011	3/2012	7/2014
	U	5/2007	2/2008	1/2010	11/2011		
	V	3/2008	10/2010	12/2011	3/2013	10/2014	
	W	2/2008	11/2009	1/2011	6/2012	2/2014	
X	4/2009	7/2010	9/2011	1/2012	11/2013	10/2014	
Y	10/2007	12/2009	9/2011	7/2013	2/2014	10/2014	

**Table A2 - A genelist resulting from comparison of blood isolates with sputum isolates; specific to isolates of Patient A only (comparison defined in [iv] Table 3)**

<b>Gene</b>	<b>Annotation or putative gene function</b>	<b>Fold change</b>
BCAL0112	Adenosylhomocysteinase	4.9 ↓
BCAL0113	Flagellar hook-associated 2 domain protein	4.4 ↓
BCAL0114	Flagellin-like protein	14.6 ↓
BCAL0125	Flagellar transcriptional regulator FlhC 1	4.6 ↓
BCAL0126	Flagellar motor component-like protein	4.1 ↓
BCAL0127	OmpA/MotB domain protein., Flagellar motor protein	2.4 ↓
BCAL0128	Response regulator receiver	3.8 ↓
BCAL0129	Chemotaxis two-component sensor kinase CheA	4.6 ↓
BCAL0132	Chemotaxis protein methyltransferase CheR	4.1 ↓
BCAL0134	Chemotaxis response regulator protein-glutamate methyltransferase	2.8 ↓
BCAL0514	Hypothetical protein	2.2 ↓
BCAL0534	Two component LuxR family transcriptional regulator	2.9 ↓
BCAL0535	Putative signal transduction histidine kinase	2.9 ↓
BCAL0577	Flagellar hook-associated protein 3	5.4 ↓
BCAL1028_J_0_1	Transposase IS116/IS110/IS902 family protein	2.7 ↓
BCAL2025	Hypothetical protein	4.5 ↓
BCAL2610	ABC-type amino acid transport system	2.3 ↓
BCAL2611	Histidine transport system permease protein	2.4 ↓
BCAL2612	Amino acid ABC transporter ATP-binding protein	3.1 ↓
BCAL2793	4-hydroxybenzoate transporter	3.4 ↓
BCAL2796	Pyruvate decarboxylase	2.2 ↓
BCAL3205a	Transcriptional regulator, XRE family	3.6 ↓
BCAL3207	Hypothetical protein	2.4 ↓
BCAM1002	Putative reverse transcriptase-Group II intron	2.0 ↓
BCAM1804	Methyl-accepting chemotaxis protein	3.6 ↓
BCAM2346	OmpW family protein	2.1 ↓
BCAM2684	GCN5-related N-acetyltransferase	3.1 ↓
BCAM2685	Hypothetical protein	5.3 ↓
BCAM2837_J_1	Response regulator receiver	2.1 ↓
IG1_147730	Flagellar motor component-like protein	6.2 ↓
BCAL0009	Putative pterin-4-alpha-carbinolamine dehydratase	3.8 ↑
BCAL0010	Phenylalanine-4-hydroxylase	20.8 ↑
BCAL0015	ABC transporter, hydrophobic amino acid uptake transporter (HAAT) family	2.5 ↑
BCAL0016	Amino acid/amide ABC transporter ATP-binding protein 2	2.1 ↑
BCAL0017	ABC branched-chain amino acid family transporter	2.1 ↑
BCAL0049	Aminotransferase class I and II	2.8 ↑
BCAL0052	FAD linked oxidase domain protein	2.3 ↑

<b>Gene</b>	<b>Annotation or putative gene function</b>	<b>Fold change</b>
BCAL0833	Putative Acetoacetyl-CoA reductase	3.2 ↑
BCAL0834	Hypothetical protein	2.8 ↑
BCAL1040	Glycosyl transferase	2.1 ↑
BCAL1236	Hypothetical protein	3.3 ↑
BCAL2450	Chromate transporter	2.0 ↑
BCAL2471	ATPase-like protein	2.5 ↑
BCAL2472	Alpha,alpha-trehalose-phosphate synthase [UDP-forming]	2.9 ↑
BCAL2739	Elongation factor G 1	7.2 ↑
BCAL2740	High-affinity nickel-transporter	2.2 ↑
BCAL3008	Outer membrane protein (Porin)	2.0 ↑
BCAL3184	Homogentisate 1,2-dioxygenase	8.8 ↑
BCAL3185	Major facilitator superfamily MFS 1	2.9 ↑
BCAL3186	Hypothetical protein	6.0 ↑
BCAL3187	Monooxygenase FAD-binding	6.3 ↑
BCAL3194	Membrane protein	2.1 ↑
BCAL3195	Uncharacterised protein	6.8 ↑
BCAL3282	Phospho-2-dehydro-3-deoxyheptonate aldolase	4.7 ↑
BCAL3283	Prevent-host-death family protein	6.4 ↑
BCAL3284	PilT protein domain protein	5.0 ↑
BCAM0059	3-oxoadipate CoA-transferase	2.6 ↑
BCAM0783	General substrate transporter:Major facilitator superfamily	2.5 ↑
BCAM0803	Muconolactone delta-isomerase	2.7 ↑
BCAM0804	Catechol 1,2-dioxygenase	4.5 ↑
BCAM0805	Muconate cycloisomerase	7.6 ↑
BCAM0810	Anthranilate 1,2-dioxygenase large subunit	5.6 ↑
BCAM0811	Anthranilate 1,2-dioxygenase small subunit	7.6 ↑
BCAM0856_J_1	Sugar transferase	5.0 ↑
BCAM0859	Capsular exopolysaccharide family	2.8 ↑
BCAM0860	Glycosyl transferase, family 2	4.6 ↑
BCAM0861	Glycosyltransferase-like protein	2.9 ↑
BCAM0863	Glycosyltransferase	2.9 ↑
BCAM1005	Acyltransferase 3	3.0 ↑
BCAM1010	UTP-glucose-1-phosphate uridylyltransferase	3.2 ↑
BCAM1172	FAD dependent oxidoreductase	16.2 ↑
BCAM1173	Gaba permease (4-amino butyrate transport carrier)	6.2 ↑
BCAM1176	DMSO reductase anchor subunit (DmsC)	3.5 ↑
BCAM1180	Predicted permease	3.9 ↑
BCAM1185	Hypothetical protein	2.2 ↑
BCAM1186	Putative NADP-dependent glyceraldehyde-3-phosphate dehydrogenase	5.1 ↑
BCAM1416	Lysine exporter protein	3.3 ↑
BCAM1417	Sensor protein copS	2.2 ↑
BCAM1418	Two component heavy metal response transcriptional regulator	2.0 ↑
BCAM1421	Cation/multidrug efflux pump	5.5 ↑
BCAM1869	Hypothetical protein	2.4 ↑
BCAM2043_J_0	Hypothetical protein	3.1 ↑
BCAM2046	Type III secretion protein SctT	2.4 ↑
BCAM2049	BcsL, type III secretion apparatus protein	3.9 ↑

<b>Gene</b>	<b>Annotation or putative gene function</b>	<b>Fold change</b>
BCAM2050	BcscK, Putative uncharacterized protein	5.6 ↑
BCAM2051	Type III secretion apparatus lipoprotein	3.7 ↑
BCAM2053	Hypothetical protein	4.7 ↑
BCAM2055	Type III secretion outer membrane pore	3.4 ↑
BCAM2073	Hypothetical protein	2.5 ↑
BCAM2165	Beta-lactamase	2.3 ↑
BCAM2503	4-hydroxyphenylpyruvate dioxygenase	3.8 ↑
BCAS0251	Hypothetical protein	3.4 ↑
BCAS0637	60 kDa chaperonin 2	2.7 ↑
BCAS0638	10 kDa chaperonin 3	2.3 ↑
IG2_943874	UDP-glucose dehydrogenase	4.2 ↑

*The maximum of up-regulated genes for flagella in isolate from sputum (A7) was seen in comparison Table 2b, point i, patient A.*

**Table A3 - Quantitative PCR on 6 genes with different expression in blood vs. sputum isolates as detected by microarrays**

(indicated at the bottom of the table)

<i>Patient ID</i>	<i>Comparison</i>	<i>T3SS</i>		<i>Capsule</i>		<i>QS</i>	
		<b>BCAM2048</b>	<b>BCAM2050</b>	<b>BCAM0859</b>	<b>BCAM0860</b>	<b>BCAM1870</b>	<b>BCAM1871</b>
<b>A</b>	A3 x A2	↑9.8x	↑9.2x	↑30x	↑23.6x	↑19.7x	↑22.7x
<b>B</b>	B8 x B7	↑16.7x	↑20.3x	↑26.2x	↑22.12	↑9.1x	↑17.7x
<b>C<sup>a</sup></b>	C6 x C5	no change	no change	no change	no change	no change	no change
	C6 x C4	↑6x	↑6.9x	↑10.2x	↑6.9x	↑4.8x	↑11.5x
<b>D</b>	D8 x D6	↑9.3x	↑8.5x	↑7.1x	↑10.2x	↓12.1x	↓9.1x
<b>E<sup>a</sup></b>	E6 x E4	↑4x	no change	no change	no change	no change	no change
	E6 x E3	↑9x	↑9x	↑12.1x	↑9x	↑3x	↑7.6x
<b>F<sup>a</sup></b>	F3 x F2	↑14.8x	↑15.1x	no change	↑8.6x	↓30x	↓9.7x
	F3 x F1	↑14.8x	↑15.2x	no change	no change	↓3.2x	↓13.9x
<b>G</b>	G5 x G4	↑21.2x	↑22.4x	↑10.9x	↑11.2x	↑6x	↑8.3x
<b>H<sup>a</sup></b>	H8 x H9	↑20.8x	↑14.9x	↑13.7x	↑16.3x	↑22.4x	↑20x
	H8 x H6	↑16.6x	↑20.9x	↑12.7x	↑8.6x	↓12.1x	no change
	H8 x H5	↑4.4x	↑3x	↑4.8x	↑3x	↓17.8x	↓15.1x
<b>Microarray results</b>	<b>A3+B8 x A2+B7</b>	<b>↑4.9x</b>	<b>↑7.3x</b>	<b>↑2.8x</b>	<b>↑4.7x</b>	<b>↑3.9x</b>	<b>↑4.5x</b>

<sup>a</sup>Comparison of blood isolate with additional sputum isolate was performed if analysis with a preceding sputum isolate (isolated closer in time to a blood isolate) showed no change in expression.

**Figure A1 - Swimming motility of isolates from patients not experiencing CS.**  
 The detected substantial decrease in motility is indicated with a grey arrow.



