

Supplemental Table 1. Survey questionnaire*

No.	Question
I. Basic characteristics	
Q.01	What is the type of your institution? <input type="checkbox"/> Tertiary hospital <input type="checkbox"/> General hospital <input type="checkbox"/> Referral medical laboratory
Q.02	What is your hospital size? <input type="checkbox"/> < 300 beds <input type="checkbox"/> 300–499 beds <input type="checkbox"/> 500–599 beds <input type="checkbox"/> ≥ 1,000 beds <input type="checkbox"/> No in-patient beds
Q.03	Does your institution provide vancomycin concentration? <input type="checkbox"/> Yes <input type="checkbox"/> No
Q.04	Does your institution provide pharmacokinetic consultation service (PKCS)? <input type="checkbox"/> Yes <input type="checkbox"/> No
II. Drug concentration testing and PKCS for 14 drugs	
(1) Vancomycin (2) Amikacin (3) Gentamicin (4) Valproic acid (5) Carbamazepine (6) Phenytoin (7) Phenobarbital (8) Digoxin (9) Theophylline (10) Methotrexate (11) Cyclosporine (12) Tacrolimus (13) Sirolimus (14) Everolimus	
Q.05	Where is the measurement performed for each of the 14 drugs? <input type="checkbox"/> Measurement performed at the institution <input type="checkbox"/> Send-out test to referral medical laboratory or another medical institution <input type="checkbox"/> Drug concentration not provided
Q.06	Has your institution provided PKCS for these 14 drugs in the past year? <input type="checkbox"/> Yes <input type="checkbox"/> No
III. Vancomycin concentration testing in institutions that provide vancomycin concentrations	
Q.07	Where is the vancomycin concentration measured, in-house or send-out test?
Q.08	Which manufacturer produces the vancomycin assay used at your institution? <input type="checkbox"/> Abbott Laboratories <input type="checkbox"/> Roche Diagnostics <input type="checkbox"/> Siemens Healthcare <input type="checkbox"/> Others: _____ <input type="checkbox"/> Not available
Q.09	When do you report vancomycin concentrations? <input type="checkbox"/> Regular working hours (daytime) on workdays <input type="checkbox"/> Daily <input type="checkbox"/> Monday to Saturday <input type="checkbox"/> Specific days of the week <input type="checkbox"/> Others: _____
Q.10	How many vancomycin concentration tests are performed per month at your institution? <input type="checkbox"/> < 10 tests <input type="checkbox"/> 10–50 tests <input type="checkbox"/> 51–100 tests <input type="checkbox"/> 101–200 tests <input type="checkbox"/> > 200 tests
IV. Clinical practice status of vancomycin PKCS	
IV-I. Departments that provided vancomycin PKCS in the past year	
Q.11	Which departments provided vancomycin PKCS in the past year? If other departments provided this service, please describe state the name of these department. <input type="checkbox"/> LM only <input type="checkbox"/> LM and other departments: _____ <input type="checkbox"/> Other departments: _____
IV-II. Institutions that provided vancomycin PKCS in the department of LM within the past year	
Q.12	How is PKCS managed in the department of LM? <input type="checkbox"/> Clinicians order vancomycin TDM report [Nu-529] <input type="checkbox"/> The department of LM is referred by clinicians for vancomycin PKCS <input type="checkbox"/> Others: _____
Q.13	How many vancomycin PKCSs are provided per month? <input type="checkbox"/> < 10 cases <input type="checkbox"/> 10–50 cases <input type="checkbox"/> 51–100 cases <input type="checkbox"/> 101–200 cases <input type="checkbox"/> > 200 cases
Q.14	What is the average turnaround time for the vancomycin TDM report? <input type="checkbox"/> < 4 hours <input type="checkbox"/> 4–8 hours <input type="checkbox"/> 8–24 hours <input type="checkbox"/> > 24 hours <input type="checkbox"/> Others: _____
Q.15	How do you obtain information on the sampling time for vancomycin concentration? <input type="checkbox"/> Manual input or record of sampling time into the HIS <input type="checkbox"/> Manual input or record of sampling time on the barcode or document requesting vancomycin PKCS <input type="checkbox"/> Automatic input into the HIS at blood collection (e.g., the use of PDA) <input type="checkbox"/> Sampling time estimated based on vancomycin infusion time and sample reception time <input type="checkbox"/> Others: _____
Q.16	How do you obtain information on a patient dosing history and infusion times of vancomycin? <input type="checkbox"/> Electronic medical records <input type="checkbox"/> Vancomycin PKCS request document <input type="checkbox"/> The LIS developed for vancomycin PKCS in the department of LM <input type="checkbox"/> Vancomycin PKCS request form in HIS
Q.17	Which pharmacokinetic software program is used for adult patients? [†] <input type="checkbox"/> Abbottbase PKS <input type="checkbox"/> Mwpharm++ <input type="checkbox"/> Others: _____
Q.18	Which eGFR equation is used for Bayesian modeling in adult patients? <input type="checkbox"/> Cockcroft–Gault <input type="checkbox"/> 2009 CKD-EPI <input type="checkbox"/> 2021 CKD-EPI <input type="checkbox"/> MDRD, non IDMS-traceable <input type="checkbox"/> MDRD, IDMS-traceable <input type="checkbox"/> Jelliffe <input type="checkbox"/> Not using eGFR as a covariate for drug clearance <input type="checkbox"/> Others: _____
Q.19	For which patient group do you use additional pharmacokinetic models or software programs? [†] <input type="checkbox"/> Neonatal <input type="checkbox"/> Pediatric group <input type="checkbox"/> Decreased kidney function (e.g., hemodialysis, CRRT)
Q.20	Do you use AUC-guided vancomycin dosing? <input type="checkbox"/> Yes <input type="checkbox"/> No

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Supplemental Table 1. Continued

No.	Question
<i>IV-II-Subgroup I. Institutions using AUC-guided vancomycin dosing[†]</i>	
Q.21	Which target index is used at your institution? <input type="checkbox"/> AUC only <input type="checkbox"/> AUC and trough concentrations <input type="checkbox"/> AUC, trough, and peak concentrations
Q.22	Which method is used to calculate AUC? <input type="checkbox"/> Bayesian modeling <input type="checkbox"/> First-order equation
Q.23	What sampling time is recommended for AUC-guided vancomycin dosing? <input type="checkbox"/> Trough and peak concentrations <input type="checkbox"/> Trough concentration
Q.24	What is the currently used target AUC for serious MRSA infections? <input type="checkbox"/> 400–600 mg · h/L <input type="checkbox"/> 450–550 mg · h/L <input type="checkbox"/> 500–600 mg · h/L
Q.25	What is the currently used target AUC for infections other than serious MRSA infections? <input type="checkbox"/> 400–600 mg · h/L <input type="checkbox"/> 400–500 mg · h/L <input type="checkbox"/> 500–600 mg · h/L
Q.26	What challenges did you face in implementing AUC-guided vancomycin dosing?*
	<input type="checkbox"/> Lack of personnel providing vancomycin PKCS
	<input type="checkbox"/> Difficulty selecting or using vancomycin pharmacokinetic software program
	<input type="checkbox"/> Problems related to communication with clinicians
	<input type="checkbox"/> Difficulty obtaining relevant clinical information from medical records
	<input type="checkbox"/> Lack of international standards or domestic guidelines
	<input type="checkbox"/> Problems related to other departments providing vancomycin PKCS
	<input type="checkbox"/> Lack of knowledge regarding vancomycin PKCS
	<input type="checkbox"/> Others:_____
<i>IV-II-Subgroup II. Institutions using conventional vancomycin dosing[†]</i>	
Q.27	Which target index is used at your institution? <input type="checkbox"/> Trough and peak concentrations <input type="checkbox"/> Trough concentration
Q.28	Are there plans to implement AUC-guided dosing in the future? <input type="checkbox"/> Yes <input type="checkbox"/> If necessary, this service may be considered in the future <input type="checkbox"/> No
Q.29	What are the expected challenges in implementing AUC-guided vancomycin dosing?*
	<input type="checkbox"/> Lack of personnel providing vancomycin PKCS
	<input type="checkbox"/> Difficulty selecting or using vancomycin pharmacokinetic software program
	<input type="checkbox"/> Problems related to communication with clinicians
	<input type="checkbox"/> Difficulty obtaining relevant clinical information from medical records
	<input type="checkbox"/> Lack of international standards or domestic guidelines
	<input type="checkbox"/> Problems related to other departments providing vancomycin PKCS
	<input type="checkbox"/> Lack of knowledge regarding vancomycin PKCS
	<input type="checkbox"/> Others:_____
<i>V. Institutions that do not provide vancomycin PKCS</i>	
Q.30	Are there plans to implement vancomycin PKCS in the future? <input type="checkbox"/> Yes <input type="checkbox"/> If necessary, this service may be considered in the future <input type="checkbox"/> No
Q.31	What are the expected challenges in implementing AUC-guided dosing?*
	<input type="checkbox"/> Lack of personnel providing vancomycin PKCS
	<input type="checkbox"/> Difficulty selecting or using vancomycin pharmacokinetic software program
	<input type="checkbox"/> Problems related to communication with clinicians
	<input type="checkbox"/> Difficulty obtaining relevant clinical information from medical records
	<input type="checkbox"/> Lack of international standards or domestic guidelines
	<input type="checkbox"/> Problems related to other departments providing vancomycin PKCS
	<input type="checkbox"/> Lack of knowledge regarding vancomycin PKCS
	<input type="checkbox"/> Others:_____

The questionnaire is presented as used in the survey as it effectively reflects the precise questions circulated among 170 clinical pathologists. *Multiple choice with multiple answers allowed.

Abbreviations: PKCS, pharmacokinetic consultation service; LM, laboratory medicine; HIS, hospital information system; TDM, therapeutic drug monitoring; PDA, personal digital assistant; CKD-EPI, Chronic Kidney Disease Epidemiology Collaboration; MDRD, Modification of Diet in Renal Disease; IDMS, isotope dilution mass spectrometry; CRRT, continuous renal replacement therapy; AUC, area under the curve; MRSA, Methicillin-resistant *Staphylococcus aureus*.