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The Honorable Seema Verma  
Administrator  
Centers for Medicare & Medicaid Services  
Department of Health and Human Services  
P.O. Box 8011  
Baltimore, MD 21244-1850

November 1, 2018

Re: Follow-up to August 30, 2018 meeting; Proposed CAR-T coverage and payment options

Administrator Verma:

The American Society for Blood and Marrow Transplantation (ASBMT) greatly appreciated our opportunity to meet with Administrator Verma on August 30<sup>th</sup> to discuss our concerns regarding current Medicare coverage and reimbursement policies for Chimeric Antigen Receptor T-cell (CAR-T) therapy. At the end of our meeting, Administrator Verma requested the ASBMT submit comments regarding potential short-term and long-term solutions within the current payment systems, along with potential options for demonstration projects. Since the meeting, the ASBMT has been working in conjunction with our colleagues at the American Society of Hematology (ASH) to develop a set of solutions that would be reflective of our joint membership community of hematologists and blood and marrow transplant physicians who are primarily administering CAR-T therapies, both in the context of research and routine clinical care.

The ASBMT is a professional membership association of more than 2,200 physicians, scientists, and other healthcare professionals promoting blood and marrow transplantation and cellular therapy through research, education, scholarly publication and clinical standards. The ASBMT is dedicated to improving the application and success of hematopoietic cell transplants (HCT) and other cellular therapies, such as CAR-T.

ASH represents more than 17,000 clinicians and scientists worldwide who are committed to the study and treatment of blood and blood-related diseases. These disorders encompass malignant hematologic disorders such as leukemia, lymphoma, and multiple myeloma, as well as non-malignant conditions such as sickle cell anemia, thalassemia, bone marrow failure, venous



thromboembolism, and hemophilia. In addition, hematologists are pioneers in demonstrating the potential of treating various hematologic diseases and continue to be innovators in the field of stem cell biology, regenerative medicine, transfusion medicine, and gene therapy. ASH membership is comprised of basic, translational, and clinical scientists, as well as physicians providing care to patients in diverse settings including teaching and community hospitals, as well as private practice.

The ASBMT and ASH (the Societies) respectfully offer the following coverage and payment options for consideration by CMS with an intent to protect patient access and provide equitable reimbursement for CAR-T.

### **Summary of Concerns**

Planning the safest and most efficacious treatment course for an individual with a hematologic malignancy is the top priority for our respective member physicians and clinicians, whether the intended therapy is CAR-T or another drug or procedure. Our member physicians' focus on personalized and patient-first care is hampered when they are burdened with the knowledge that there are conflicts between the appropriate care settings and reimbursement levels.

*Inpatient Payment:* The current FY 2019 national Inpatient PPS (IPPS) payment rate for MS-DRG 016 (Autologous Bone Marrow Transplant or T-cell Immunotherapy), into which CAR-T cases are grouped, is approximately \$39,000. For providers subject to IPPS, the payment may be augmented by the full New Technology Add-on Payment (NTAP), and they may potentially also receive an outlier payment. The total payment providers are likely to receive will still leave the vast majority of inpatient CAR-T cases as substantially under-paid, given the high product acquisition cost (\$373,000 for both the Novartis and Kite/Gilead products) and significant patient care costs expended by the treating hospital.

*New Technology Add-on Payment:* While helpful to supplement a relatively low base payment rate, the NTAP mechanism is problematic in several ways for drugs acquired at a high cost, such as CAR-T.

As CMS understands, the maximum NTAP amount for any drug is limited to the lesser of 50% of the excess cost of the case or the predetermined amount (50%) of the product. In the case of CAR-T, the maximum amount a center could receive for an NTAP payment is \$186,500. This amount is a significant improvement over the MS-DRG 016 base payment of \$39,000, but it is still \$186,500 short of the acquisition cost that each provider is currently paying the manufacturers in order to deliver the intervention to a patient in need. These drugs are personalized (autologous) cell products that are manufactured for a specific patient at a specific time; they cannot be purchased in bulk, pre-stocked or re-routed to another patient. As such, providers are not currently receiving discounts and the \$186,500 minimum shortfall is a true financial loss for the treatment center. We understand the intent of NTAP is not to cover the full cost of the product, but we do not believe that the stakeholder community envisioned current drug prices at the time the



calculation methodology was developed. This level of loss on a per case basis is unprecedented - for the sake of perspective, the \$186,500 remainder not covered by the NTAP payment equates to 4.7x the entire base MS-DRG 016 payment rate.

Additionally, the \$186,500 maximum payment is not automatically distributed to providers submitting a CAR-T claim. As with all other aspects of IPPS reimbursement, it can only be achieved if providers mark-up the CAR-T product acquisition expense in accordance with their operating cost-to-charge ratio (CCR) and report the marked-up amount as their billed charge. CMS will multiply this high billed gross charge by the hospital's operating CCR to reduce the charge to a calculated cost, and then uses the calculated cost to determine NTAP and outlier payments on a per-case basis, as well as for future rate-setting. This complicated cost estimation methodology pre-dates the implementation of the DRG-based IPPS system in 1983 and necessitates hospitals to bill high gross charges for expense-based items to reverse-engineer payment based on CMS' CCR methodology. If providers do not engage in this reverse-engineering, CMS' cost-estimation process will calculate a very low estimated cost and result in inadequate current and future payment rates. A hospital with an overall CCR of .25 would need to mark-up the CAR-T product by 400% - resulting in a gross billed charge of \$1,492,000 just for the CAR-T product - to access the \$186,500 NTAP amount approved by CMS.

Billing these high gross charges is problematic for several reasons that matter to beneficiaries. First, the majority of beneficiaries will not understand this complex system and therefore will not understand that a high charge for the product on their itemized financial statement is not related to their actual financial responsibility. This justified confusion may rightfully cause significant anxiety on the part of the beneficiary and her/his caregiver. Second, reports by the press using gross charge amounts increase confusion and controversy over the treatment's costs for potential patients considering moving forward with treatment. Third, new and well-intended price transparency requirements will exacerbate this issue of billed-vs-actual charges by creating a false sense of price competition between hospitals when facilities begin to post all of their charges online.

*Access to Care Implications and Analysis:* The financial losses associated with providing CAR-T treatment to Medicare beneficiaries is impacting access to care and will continue to do so unless the payment challenges are resolved. Facilities currently providing CAR-T, or who are in the process of becoming certified, are aware of the aforementioned reimbursement information and are taking it into consideration as they map out patient care pathways. Providers are reluctant to step forward publicly to discuss these complex and sensitive issues about access barriers, as that information would certainly be conveyed negatively by the press and public.

Members have shared that their teams have felt compelled to consider one or more of the following treatment pathway modifications, due to the current payment systems:



1. *Shifting some CAR-T therapy to the outpatient setting to recover product acquisition costs.* Most of our member clinicians currently consider the inpatient setting to be most clinically appropriate for the average patient, due to the likelihood of adverse events occurring in the days post-infusion.<sup>1</sup> When life-threatening, these clinical complications necessitate intensive medical monitoring that is most appropriate in the inpatient setting. A significant portion of CAR-T cases are expected to transition to the outpatient setting over time as refinements are made to products and to the clinical protocols aiming to predict and mitigate post-infusion complications. However, providers have begun considering outpatient care delivery models for certain subsets of patients earlier than previously anticipated to ensure appropriate payment for CAR-T.
2. *Choosing not to participate in the clinical studies associated with a Coverage with Evidence Development (CED) decision, if that is the result of the National Coverage Analysis (NCA) for CAR-T (CAG-00451N).* CMS opened the NCA<sup>1</sup> in May 2018 and cited limited outcomes data in the traditional Medicare beneficiary age group, high rates of complications, limited long-term follow-up, and concerns about site of care. While CMS seems likely to pursue a CED pathway to consider these issues, given the lack of certainty cited in the NCA document, we note that participating in CED requires a set of voluntary and proactive set of actions by the provider community, including study protocol submission and center enrollment. The inadequate payment associated with IPPS provision of CAR-T may deter facilities from electing to participate in the CED study mechanism, creating a situation in which only a few facilities choose to enroll. If only a small number of centers elect to participate, beneficiaries will face difficulty trying to locate a provider and the participating providers will face a concentration of patients, multiplying the effect of the financial losses already being incurred when providing CAR-T.
3. *Electing not to provide commercial CAR-T products to any portion of their patient population or focusing on accrual to appropriate clinical trials.* Many centers have multiple clinical trials open for the same indications, which may allow flexibility in patient pathways between commercial and trial products.

## **Proposed Solutions**

The Societies' joint recommendations focus on supporting appropriate payment for personalized cell therapies, agnostic of product manufacturer, care setting and provider type, through two routes: 1) a set of immediate technical fixes and 2) longer-term changes implemented through the rule-making process. We strongly believe by utilizing the solutions outlined below, CMS will address the aforementioned concerns and ensure the provision of current and future individualized cellular therapies in a manner that supports both beneficiaries' need for predictable and consistent

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<sup>1</sup> [National Coverage Analysis \(NCA\) Tracking Sheet for Chimeric Antigen Receptor \(CAR\) T-cell Therapy for Cancers \(CAG-00451N\)](#)



access to care, and CMS' goals of transparency, prudent purchasing of services, incentivizing efficiency, and providing high-quality healthcare services to patients.

### Technical Solutions through Claims Processing, Coding, and Other Sub-regulatory Guidance

The agency has a unique opportunity to create a detailed, transparent, and robust coding and billing structure from the outset of utilization of new therapies like CAR-T. Implementing an appropriate coding, billing, and data collection infrastructure will greatly reduce administrative complexity for providers and minimize errors on the part of treatment centers, while providing CMS with the maximum flexibility to create alternative payment models in the future. The Societies urge CMS to implement the following technical modifications at the earliest possible date to maximize the number of future claims with detailed information about CAR-T products, the resources required to treat patients, and the overall nature of the patient's clinical care.

Prior to the implementation of these changes, CAR-T and similar products would only be reflected as part of total pharmacy charges (i.e., revenue code 0250) on inpatient institutional claims (837I). CMS would not be able to separate out charges associated with the CAR-T product or identify which specific CAR-T product was utilized. To rectify this situation, CMS can issue sub-regulatory guidance to hospitals while making the internal claims processing system changes necessary to implement National Uniform Billing Committee (NUBC) CAR-T claim transaction codes (approved in August 2018; effective April 1, 2019), which are provided in Appendix A. Once implemented, these changes will enable CMS to specifically identify the exact cell and gene therapy product, the related charges and the actual product acquisition cost information.

The detailed necessary changes that CMS would need to release in transmittals include:

- a. Requiring revenue code 0891 to report the cell or gene therapy product charge.
- b. Requiring all cell and gene therapy products to be reported with their product-specific HCPCS code (i.e., the CAR-T product Q-codes) on the inpatient claim, similar to how detailed HCPCS reporting occurs for clotting factors on inpatient claims.
- c. Implementing a Medicare Code Editor (MCE) edit requiring either the presence of clinical trial diagnosis code Z00.6 and condition code 30, or a non-zero dollar value in new NUBC revenue code 0891 when either of the ICD-10-PCS CAR-T administration codes (i.e., XW033C3 or XW043C3) is on the claim.



- d. Releasing instructions that hospitals and physicians are to bill the new Category III CPT codes for CAR-T services starting January 1 2019,<sup>2</sup> when applicable, using new sub-category 087x revenue codes.
  - i. Instructing providers not to use the unlisted CPT code 38999 (Unlisted procedure, hemic or lymphatic system), or any other “approximate” code (such as drug administration or transplant codes), now that more specific codes are available<sup>3</sup>
  - ii. Assigning OPPS separately payable status indicators to the four new Category III CPT codes starting January 1, 2019, pursuant to the recommendations from the Advisory Panel on Hospital Outpatient Payment<sup>4</sup>. (See Appendix B)
  - iii. Instructing Medicare Administrative Contractors (MACs) to add new Category III CAR-T CPT codes to their local policies and/or coverage articles.<sup>5</sup>
- e. Requiring hospitals to report Value Code 86 and include the actual dollar amount of the product’s acquisition cost. CMS can then compare these amounts with the ASP data reported by the manufacturers.
- f. Creating a new, distinct pharmacy standard cost center for cell and gene therapy products on the hospital cost report. Hospitals are already setting up their own subscribed lines but having CMS issue a required line would ensure more accurate reporting, similar to the issuance of center 0077

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<sup>2</sup> The American Medical Association’s CPT process recognized the need for a set of CAR-T specific codes by awarding the following four new CPT Category III codes in May 2018, available for use in January 2019:

0537T Chimeric antigen receptor T-cell (CAR-T) therapy; harvesting of blood-derived T lymphocytes for development of genetically modified autologous CAR-T cells, per day

\* 0538T Chimeric antigen receptor T-cell (CAR-T) therapy; preparation of blood-derived T lymphocytes for transportation (e.g., cryopreservation, storage)

\* 0539T Chimeric antigen receptor T-cell (CAR-T) therapy; receipt and preparation of CAR-T cells for administration

\* 0540T Chimeric antigen receptor T-cell (CAR-T) therapy; CAR-T cell administration, autologous  
ASBMT and ASH plan to pursue Category I assignment when sufficient annual volume is reached.

<sup>3</sup> Certain stakeholders are communicating to providers and CMS that there is no need for any new codes for describing the various services associated with CAR-T, including the administration of CAR-T, as they believe existing chemotherapy administration CPT codes can be used. Our member physicians have repeatedly stated that CAR-T is not the same as a commercial off-the-shelf chemotherapy drug or other highly complex drug. Both the AMA’s CPT Editorial Panel and the NUBC finalized new codes to capture CAR-T therapy. Now that these codes are available, the Societies feel it is inappropriate to suggest that providers use chemotherapy codes to report a CAR-T collection, cell processing, or infusion, or that CMS needs to issue guidance to the contrary.

<sup>4</sup> [August 20, 2018 Advisory Panel on Hospital Outpatient Payment Recommendations](#)

<sup>5</sup> CMS could utilize the recently-announced reforms to Medicare’s Local Coverage Determination (LCD) process to request all Medicare Administrative Contractors (MACs) to add the Category III codes to their respective policies.



- j. Issuing clear guidance on use of the current product Q codes. If CMS' intention is for providers to bill the Q code at the time of cell collection, it would provide a simple and immediate solution to some coding and billing challenges by allowing providers to report well in advance of a potential inpatient admission and recover the full cost for the acquired final product. If the use of the Q code in this manner is not CMS' intent, we request the agency provide guidance on how providers are to report cell collection and processing, and to re-examine its continued use of the existing descriptions. Our organizations, multiple providers and the manufacturers themselves have requested that CMS remove clinical services from the Q-code descriptions (See Appendix C: ASBMT's May 2018 statement to CMS' HCPCS group). Separating the clinical services from the drug product will alleviate administrative burden for providers, as well as remove any inappropriate discounts currently being applied to the bundled clinical services through the 340B program.
- k. Addressing diagnosis coding issues associated with CAR-T. Centers have expressed concerns regarding whether to report an encounter for anti-neoplastic immunotherapy or the underlying disease (such as lymphoma) as the principal diagnosis for CAR-T. Additionally, the current lack of diagnosis codes for Cytokine Release Syndrome and other CAR-T related toxicities is something the provider community is seeking from the ICD-10 Coordination and Maintenance Committee. We encourage CMS to work closely with the National Center for Health Statistics (NCHS) and other coding authorities to address these issues. More details are provided about both diagnosis coding issues in Appendix D.

We believe that the technical coding, billing, and claims reporting requests, except for the one related to the NUBC codes, are straightforward enough for CMS to implement immediately. The NUBC coding changes should be made April 1, as soon as the codes become active. Utilizing data collected in the described manner will better enable CMS to create accurate future payment rates under the current payment system or as part of a new model.

#### Future Coverage of CAR-T Therapy

Per the concerns outlined previously in this letter, the Center for International Blood and Marrow Transplant Research (CIBMTR) made several recommendations to CMS' Coverage and Analysis Group during a meeting held on September 10, 2018. The Societies support these recommendations.

The CIBMTR recommended that CMS implement a National Coverage Determination based on the FDA-approved indications for particular CAR-T products, while requiring provider reporting of key data elements to the CIBMTR's Cell Therapy Registry. CMS could establish a process for the CIBMTR to share aggregate data on Medicare beneficiaries at set intervals and engage the provider and researcher communities on key questions of interest. This format would allow CMS



to avoid the potential access concerns associated with the CED's voluntary/opt-in model and also facilitate a rapid and collaborative learning cycle with the provider community. As data accumulates, CMS could adjust the NCD more quickly than would be possible if it was operating under a CED with a set of specific questions requiring lengthy follow-up and analysis.

The Societies believe CMS should not implement CED for the reasons already discussed; however, if CMS feels that CED is unavoidable, we ask that the agency utilize an observational study format instead of a prospective, comparative study. There will be significant difficulty in identifying appropriate controls for the approved indications, and in adjusting protocols to incorporate new products as they are included. Additionally, the cost and personnel burden of developing a comparative study would further the risk of centers electing not to participate.

CMS's interest in collecting Patient Reported Outcomes (PROs) associated with CAR-T treatment can be addressed through collaboration with CIBMTR as it implements its new ePRO platform. A working group at CIBMTR has been established that could assist CMS with a structured pilot study on CAR-T patients to identify the most optimal PROs and time points for collection.

Finally, we ask that CMS and FDA work together to develop a parallel review process for cell and gene therapies to minimize the access barriers, confusion and additional burden on providers that comes from the current sequential and uncoordinated processes.

#### Proposed Changes Relevant to the FY 2020 IPPS Rulemaking Cycle

For the FY 2020 IPPS cycle, the Societies request the implementation of a CCR of 1.0 applied to the CAR-T product, in conjunction with the implementation of the NUBC changes detailed previously. Using the NUBC claim changes with a CCR of 1.0, CMS can continue to utilize the current NTAP and outlier payment methodology in FY 2020 while creating a pathway for PPS providers to gain the maximum NTAP payment without the transparency concerns currently associated with reporting the product charges. The Agency proposed a CCR of 1.0 for the product in the FY 2019 IPPS Proposed Rule but did not finalize a solution, citing concerns about how it would be implemented without additional detail on the claims.

We believe CMS can again consider a CCR of 1.0, given the implementation of the NUBC changes, and do so in a manner that is more closely aligned with CMS' perceived intent – one that is based on reported actual acquisition costs, using Value Code 86. This ensures that no dollars associated with a mark-up would be included or paid using the NTAP or outlier formulas, which protects CMS from possible over-payments and helps hospitals avoid the use of high mark-ups.

Our recommendation is for CMS to replace the provider's line item CAR-T product billed charge (as detailed on the inpatient claim with a HCPCS code and revenue code 0891) with the actual acquisition cost reported with new value code 86 in the computation of the NTAP and the outlier. This will provide CMS with transparent information about product acquisition cost, and any

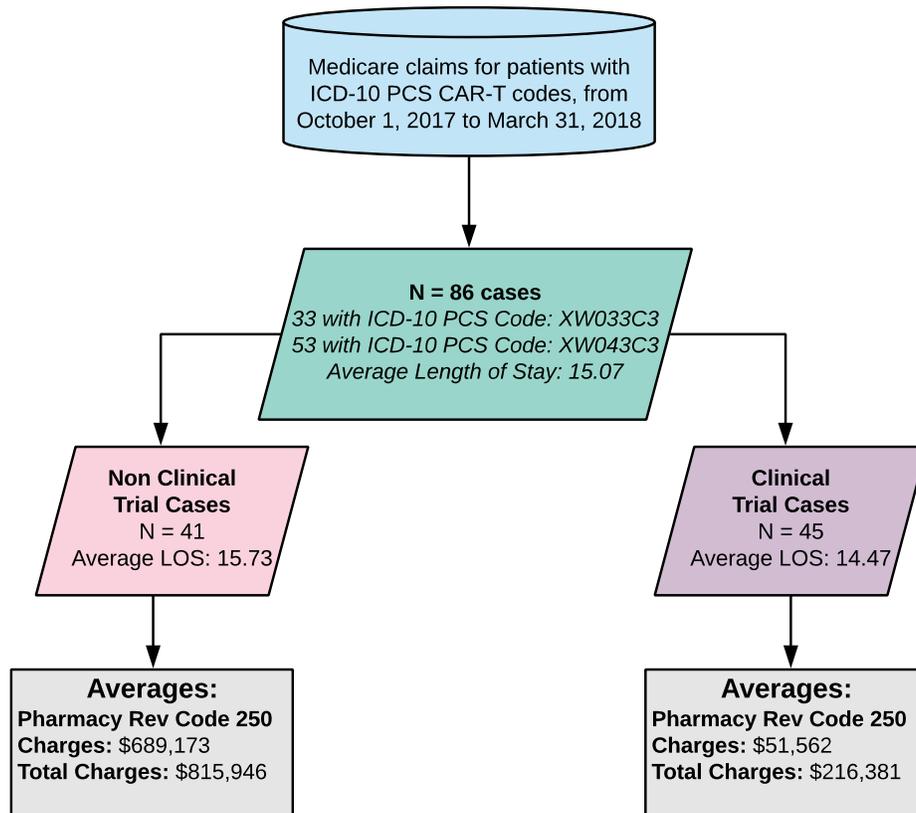


discounts, which meets the agency's goals and ensures that it has accurate data for future rate-setting. This will result in the full NTAP payment of \$186,500 being made to all PPS-hospitals providing CAR-T and would more clearly identify that any outlier payment generated was solely to cover patient care costs. This policy reflects a truer definition of a CCR of 1.0 and can be utilized for both PPS and PPS-exempt institutions. PPS-exempt hospitals do not have access to NTAP, outlier payments, or updates to MS-DRGs to address extreme payment shortfalls. The payments made to PPS-exempt hospitals are likely to be equally as inadequate as those made to PPS hospitals, if not more so. For PPS-exempt institutions, a CCR of 1.0 payment mechanism could be implemented through standard cost-reporting processes that would enable the agency to identify the cost to the hospital of acquiring the therapy and reimburse for it accordingly. We support comments from the Alliance of Dedicated Cancer Centers on mechanisms to provide short-term relief for PPS-exempt institutions.

We stress that our recommendation to use a CCR of 1.0 in FY 2020 does not mean our membership endorses or approves of the high product prices set by manufacturers, or that our members feel that this interim solution adequately addresses the issue of financial losses associated with the provision of CAR-T. Rather, our intention with this request is to preserve patient access to care while more durable solutions are being vetted. Implementing a CCR of 1.0 in the recommended manner is an appropriate interim step that CMS can utilize during the second and final year of NTAP eligibility to alleviate a portion of the current financial concerns.

Finally, we wish to specifically note that our organizations are not requesting new MS-DRGs for CAR-T in FY2020, given the limited amount of data CMS has received for inpatient CAR-T admissions since the FDA approvals (see following table for details). We support the long-term development of MS-DRGs specific to CAR-T and we believe that the technical claim reporting changes requested in this document will allow CMS to have the highest quality data for analysis and planning purposes. We may be able to share some de-identified all-payer claims data with CMS in the near future to aid the Agency's understanding of claim and charge reporting practices.

## FY 2018 Medicare CAR-T Claims



If CMS does not implement the short-term sub-regulatory changes we recommend, a small number of providers that are familiar with the NTAP and outlier payment calculation process will likely report high gross billed charges – in effect reverse engineering CMS’ calculations, resulting in accurate cost calculations when CMS uses its CCR methodology; however, these accurate amounts are likely to be trimmed out of the future rate-setting process. We ask CMS to be cognizant of this issue and consider modifications to its typical trim criteria to allow accurate reporting and future rate-setting.

### Development of CMMI Alternative Model Demonstrations

Our organizations recognize that CMS has been charged with thinking more broadly about how to modify its existing payment systems to accommodate not only these first two cell therapies, but also to address payment issues for future cell and gene therapies. To that end, we offer the following ideas for consideration in potential demonstration projects.



- a. Case-Rate or Episode Approach: Commercial payers reimburse for cellular therapy, whether HCT or CAR-T, through a contracted global rate that includes provision for clinical services and separate reimbursement for the cell or gene product based on invoice cost. This model could be utilized in both the inpatient and outpatient settings to allow for site neutrality. If CMMI is able to develop this approach, it is likely to see savings over time by eliminating the +6% currently associated with outpatient infusion of the CAR-T product, especially as more of these products will shift to that setting in the future.
- b. Shared Learning Model: CMS could create a mechanism by which centers are reimbursed for their product acquisition costs over the course of a year, in return for participating in a three- to five-year collaborative process of enhanced data reporting and scientific evaluation. Building off of our recommendations present in the Coverage section, CMS could establish set payment amounts for the relevant inpatient and outpatient clinical services and separately reimburse for the costs of the product at two or three set time intervals, after a hospital has submitted detailed reporting on beneficiary status through the CIBMTR. Representatives of participating centers could partner with the CIBMTR and CMS to identify data trends, important clinical practice findings, and questions in need of further study. CMS would potentially gain beneficiary-specific findings earlier than would normally appear through the traditional vetting/analysis of clinical data by academic centers or researchers. Participating centers would be compared to centers reimbursed through the standard mechanisms for improved quality or lower costs driven by the enhanced reporting model. This could be implemented in tandem with the resolution of the National Coverage Analysis or CMS could replace the current NCA process with formal consideration of this model.
- c. Outcomes-Based Payment: Our organizations understand the desire for CMS and other healthcare payers to link more payments to patient outcomes. Our member providers are concerned that it is premature to establish an outcomes-based payment model due to current limitations in understanding of the clinical factors driving key outcomes, such as remission or progression-free survival. Our membership is keenly aware that patient selection, specific drug manufacturing practices, and pre- and post-infusion treatment decisions likely impact CAR-T's interim and durable responses. However, without robust community analysis of the utilization and outcomes data that will be generated over the coming years, we are reluctant to advocate for a payment system that may disproportionately harm provider financial status if outcomes are predominantly affected by factors out of their control, such as specific product constructs. Our member providers are very willing to jointly pursue an outcomes-based payment approach following an initiative such as the Shared Learning Model, outlined above, at which time the differences between product quality and clinical practice quality may be more easily identifiable.



- ⊕ Competitive Acquisition Program/Drug Value Program: In the OPPS CY 2019 Proposed Rule, CMS sought commentary on potential variations of the Competitive Acquisition Program (CAP) and the MedPAC proposed Drug Value Program (DVP). In our OPPS comment letters to CMS, we shared the perspective that a complex third-party system is unlikely to show sufficient net value compared to the administrative complexities required, despite having the potential benefit of providers being removed from carrying the acquisition cost. We note that the recent release of the International Pricing Index Model for Part B Drugs addresses some of these concerns but does not yet include a provision for Part A acquisition. A solution that addresses both sites of care is critical because providers may not know the specific site of care for infusion at time of product ordering or may need to adjust the care setting on very short notice due to the beneficiary's clinical status. We support a program that allows CMS and other government agency payers to acquire CAR-T products for use in both care settings at a rate that preserves patient access and equitably reimburses providers.

## Conclusion

We reiterate our thanks to CMS leadership and staff for their continued willingness to regularly meet with our organizations regarding our concerns. We welcome the opportunity for further dialogue with CMS staff on any aspects of the proposals outlined in this letter.

For questions related to this letter, please contact:

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A handwritten signature in black ink, appearing to read "John F. DiPersio".

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**Appendix A: National Uniform Billing Committee (NUBC) CAR-T Claim Transaction Codes Effective April 1, 2019**

<http://www.nubc.org/subscribersonly/PDFs/Cell%20Therapy%20Changes%20August%202018.pdf>

**Effective Dates:**  
**UB-04: July 1, 2018, April 1, 2019**  
**837: Upon Implementation**  
**of Post 5010 HIPAA Standard**  
**Meeting Date: 3/3/15, 8/4/15, 4/6/16, 8/9/17**  
**8/7/18**

**Form Locators 39-41**  
 Page 14 of 19

86	Cell/Gene Therapy Invoice Cost (Effective 4/1/19)	\$	Invoice/acquisition cost of modified biologics. For use with Revenue Category 089x.
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<b>087x</b>	<b><u>Cell/Gene Therapy</u></b>			
	Charges for procedures performed by staff for the acquisition and infusion/injection of genetically modified cells.			
<u>SubC</u>	<u>Subcategory Definition</u>	<u>Standard Abbreviation</u>	<u>Unit</u>	<u>HCPCS</u>
0	General Classification	CELL/GENE		
1	Cell Collection	CELL/GENE CELL COLL		
2	Specialized Biologic Processing and Storage - Prior to Transport	CELL/GENE TRANS PRIOR		
3	Storage and Processing after Receipt of Cells from Manufacturer	CELL/GENE STOR PROC AFT		
4	Infusion of Modified Cells	CELL/GENE INFUSION		
5	Injection of Modified Cells	CELL/GENE INJECTION		
6-9	RESERVED			



**089x Pharmacy - Extension of 025x and 063x**

The category is an extension of 025x and 063 x for reporting additional breakdown where needed.

<u>SubC</u>	<u>Subcategory Definition</u>	<u>Standard Abbreviation</u>	<u>Unit</u>	<u>HCPCS</u>
0	RESERVED (Use 0250 for General Classification)			
1	Special Processed Drugs - FDA Approved Cell Therapy <sup>(a)</sup>	DRUGS/CELL THERAPY		
2-9	RESERVED			

<sup>(a)</sup> Charges for drugs and biologics for modified cell therapy requiring specific identification as required by the payer. If using a HCPCS to describe the drug, enter the HCPCS code in the appropriate HCPCS column.



## Appendix B: CMS Advisory Panel on Hospital Outpatient Payment; Status Indicator Assignment to New Category III CAR-T CPT Codes

Panel Recommendations: <https://www.cms.gov/Regulations-and-Guidance/Guidance/FACA/Downloads/2018-08-20-HOP-Panel-Meeting-Agenda.zip>

ASBMT Presentation: <http://asbmt.org/practice-resources/coding-and-reimbursement/car-t-therapy>

From the Recommendations Document:

2. The Panel recommends that CMS reassign the status indicators (SIs) for the following CPT codes from B to S:
  - CPT code 05X1T, *Chimeric antigen receptor T-cell (CAR-T) therapy; harvesting of blood-derived T lymphocytes for development of genetically modified autologous CAR-T cells, per day*
  - CPT code 05X2T, *Chimeric antigen receptor T-cell (CAR-T) therapy; preparation of blood-derived lymphocytes for transportation (eg, cryopreservation, storage)*
  - CPT code 05X3T, *Chimeric antigen receptor T-cell (CAR-T) therapy; receipt and preparation of CAR-T cells for administration*
  - CPT code 05X4T, *Chimeric antigen receptor T-cell (CAR-T) therapy; CAR-T cell administration, autologous*

The Panel further recommends that CMS assign CPT code 05X1T and CPT code 05X4T to APC 5242, *Level 2 Blood Product Exchange and Related Services*, and CPT code



05X2T and CPT code 05X3T to APC 5241, *Level 1 Blood Product Exchange and Related Services*.

3. The Panel recommends that CMS not implement the proposals for reduction in payment for outpatient clinic visits or restrictions to service line expansions. The Panel recommends that CMS study the matter to better understand the reasons for increased utilization of outpatient services.
  
4. In the interest of validating the packaging methodology, the Panel recommends that CMS publish the detail of packaging payments, specifically the information for clinical laboratory tests and ancillary services, as well as total packaged costs, and that CMS publish the data along with its proposed and final rules so that stakeholders have an opportunity to evaluate and respond to the data.



## Appendix C: ASBMT's Comments to CMS HCPCS Coding Group Regarding Current Product Q-Codes; May 16, 2018

Also available on ASBMT's Website: <http://asbmt.org/practice-resources/coding-and-reimbursement/car-t-therapy>

The American Society for Blood and Marrow Transplantation (ASBMT) is a professional membership association of more than 2,200 physicians, scientists and other healthcare professionals promoting blood and marrow transplantation and cellular therapy through research, education, scholarly publication and clinical standards. The ASBMT is dedicated to improving the application and success of hematopoietic cell transplants and other cellular therapies, such as CAR-T.

**The ASBMT respectfully but firmly disagrees with the preliminary coding recommendations offered by CMS for codes Q2040 and Q2041.** We have expressed our concerns in detail through a letter submitted to CMS in February and at an in-person meeting with CMS in March 2018. We are also aware that many providers have reached out to CMS independently to share the same concerns.

**We ask CMS to consider the following points and to modify the proposed coding recommendation to exclude provider clinical services from current and future Q or J codes for CAR-T products.** The ASBMT considers the Agency's inclusion of clinical services, such as apheresis, with the payment for delivery of a drug to be inappropriate, as it runs counter to all other CMS-instructed standard provider billing guidance and practices. Providers are concerned about violating state transparency and price reporting laws and whether accepting payment from manufacturers for clinical services could conflict with the terms of hospitals' participation agreements with Medicare, which stipulate that hospitals agree to accept no more in payment than the Medicare allowable amounts for inpatient and outpatient services.

**The inclusion of clinical services with payment for a drug is the *de facto* creation of a bundled care episode.** If CMS' intention is to create a bundled payment, such as a C-APC, for the provision of CAR-T in the outpatient setting, a proposal should be made through the Outpatient Prospective Payment System rule-making process in order to allow for full stakeholder engagement and commentary.

**Other than being the first autologous cell-based drug, Provenge (Q2043) is not related to CAR-T or other autologous cell therapies for hematologic malignancies.** CAR-T represents an entirely new group of therapies with different processes, patient populations and treatment intentions. As an example of a core difference, the same providers provide apheresis and the infusion to the patient, versus a manufacturer-contracted model of apheresis providers different than the infusing provider for Provenge. CMS needs to review the CAR-T situation independently from prior autologous products.

**The concerns of the provider community responsible for serving patients and providing access to these therapies should outweigh the preferences of manufacturers.** The current Q-code structure reflects one company's business model and does not take the variation of other manufacturers' practice into account. If this Q-code structure is implemented uniformly with



all upcoming autologous cell-derived products, providers will not have the ability to recover the costs associated with apheresis and other services if a manufacturer chooses not to reimburse providers. Patients do not receive CAR-T in isolation from the rest of the course of their treatment and providers should not have to take on unnecessary and undue steps to separate CAR-T clinical services from the rest of treatment course.

We welcome the opportunity to discuss these issues further with CMS.



## Appendix D: Request for Coding Guidance and New CAR-T Complication Codes

We request that CMS specify what diagnosis code it expects to be reported as the Principal Diagnosis code for CAR-T cases. Additionally, we believe it is critical for CMS to work with the coding authorities, such as the National Center for Health Statistics (NCHS) and the American Health Information Management Association (AHIMA) to develop new codes for CAR-T toxicities and other associated clinical events to understand the acuity, resource intensity, and patients' short-and-long term outcomes. We provide additional details about these two issues below.

### Principal Diagnosis Coding Issue

Chapter 2 of the ICD-10-CM Official Guidelines for Coding and Reporting on Neoplasms indicates if treatment is directed at a malignancy, the malignancy is to be reported as the principal diagnosis. The only exception to this guideline is if a patient admission/encounter is solely for the administration of chemotherapy, immunotherapy or external beam radiation therapy, the appropriate Z51.-- code should be the first-listed or principal diagnosis, and the diagnosis or problem for which the service is being performed as a secondary diagnosis.<sup>6</sup>

CAR-T is a type of immunotherapy, specifically a subset of immuno-oncology, yet it is very different type than the medical benchmark for immunotherapy was at the time this guidance was developed. Coders are questioning whether CAR-T cases should be subject to this guideline given the differences.

For FY2018, the diagnosis code reported as the claim's principal diagnosis impacted the MS-DRG assigned to CAR-T cases and drove the assigned reimbursement from CMS for Medicare beneficiaries. For FY2019, the MS-DRG assignment is now based on the use of Pre-MDC logic, whereby the CAR-T ICD-10-PCS codes are directly assigned to MS-DRG 016. However, we have continued to receive requests for clarification from the coding community, who have received contradictory and varied answers to questions submitted to the AHA ICD-10 Coding Clinic regarding principal diagnosis for CAR-T. One hospital was told it would be appropriate to report the underlying cancer as the principal diagnosis (i.e., the lymphoma), while another was told it would be appropriate to report encounter for immunotherapy, Z51.12 as the principal diagnosis.

The Societies believe that it is more appropriate for the *actual cancer diagnosis* for which the CAR-T is being provided to be coded as the principal diagnosis code, rather than a secondary code. Reporting the cancer diagnosis as secondary, which often occurs, does not comport with the diagnosis' significance as the reason for selecting and providing CAR-T to the patient.

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<sup>6</sup> [https://www.cdc.gov/nchs/data/icd/10cmguidelines\\_fy2018\\_final.pdf](https://www.cdc.gov/nchs/data/icd/10cmguidelines_fy2018_final.pdf) and <https://www.cdc.gov/nchs/icd/data/10cmguidelines-FY2019-final.pdf>



Moreover, we believe the clinical and resource homogeneity of non-CAR-T cases reported with Z51.12 are vastly different from CAR-T cases reported with Z51.12 as the principal diagnosis. To test our hypothesis, we requested Watson Policy Analysis to analyze the data, and provide our findings below. The analysis supports our hypothesis that patients receiving CAR-T (as defined by one of the two CAR-T ICD-10-PCS codes) have a very different length of stay and charge profile compared to those who do receive some sort of antineoplastic immunotherapy but not CAR-T.

Table 1: Length of stay differences in CAR-T vs. Non CAR-T cases reporting with Z51.12

Inpatient Claims with Z51.12 Reported	Frequency	% of Cases	Min LOS	Mean LOS	Median LOS	Max LOS
1. CAR-T with Z51.12 as PDX	21	2.15	2	14.00	12	38
2. Non-CAR-T with Z51.12 as PDX	935	95.80	1	5.26	4	77
3. CAR-T without Z51.12 as PDX	20	2.05	3	17.5	16.5	30

Table 2: Charge differences in CAR-T vs. Non CAR-T cases reporting with Z51.12

Inpatient Claims with Z51.12 Reported	Frequency	% of Cases	Min Total Claim Charges	Mean* Total Claim Charges	Median Total Claim Charges	Max Total Claim Charges
1. CAR-T with Z51.12 as PDX	21	2.15	\$34,901	\$1,162,098	\$1,039,575	\$2,877,162
2. Non-CAR-T with Z51.12 as PDX	935	95.80	\$3,423	\$111,450	\$62,647	\$1,095,190
3. CAR-T without Z51.12 as PDX	20	2.05	\$16,418	\$452,486	\$190,095	\$1,109,821

\* High variability in charges for CAR-T cases is likely due to provider concerns around marking-up the product acquisition cost

As a result of the data above and the persistent coding confusion, we request that CMS work with the National Center for Health Statistics to revise the existing Z51.12 coding guideline, which is not applicable to CAR-T. We request that clear guidance be released by the NCHS, CMS, and/or the AHA ICD-10 Coding Clinic. This will ensure that all providers have a clear, consistent, and timely answer about reporting the underlying disease/cancer as the principal diagnosis code when CAR-T is administered. This is particularly important as new cell and gene therapies are approved by the FDA to treat the same diagnoses.

### Release New ICD-10-CM Diagnosis Codes

At the upcoming March 2019 meeting, we anticipate the ICD-10 Coordination & Maintenance Committee will discuss the release of new codes to identify the presence and severity of various



CAR-T side effects or known complications after the cells are infused, primarily Cytokine Release Syndrome (CRS) and CAR-T-Cell related encephalopathy syndrome (CRES).

The Foundation for the Accreditation of Cellular Therapy (FACT) defines CRS as a “reaction from the release of cytokines from cells targeted by an antibody or immune effector cells.” When cytokines are released into circulation, a range of symptoms can result, including low-grade constitutional symptoms, or a high-grade syndrome associated with life-threatening multi-organ dysfunction. A massive cytokine release is an oncologic emergency, and special precautions must be taken to prevent the life-threatening complications.

In the pivotal multicenter ZUMA-1 trial of axicabtagene ciloleucel (KTE-C19) of patients with refractory aggressive B-cell NHL, the rates of grade  $\geq 3$  CRS and neurological toxicities were 13% and 28%, respectively, among the 101 patients. Conversely, in an interim analysis of the JULIET trial of tisagenlecleucel (CTL019) in 51 patients with relapsed or refractory DLBCL, these rates were 26% and 13%. Of note, the grading systems for CRS differed between these two trials.<sup>7</sup>

When these complications arise, they are documented in the patient’s medical record. Physicians specifically document the occurrence of CRS or CRES to describe the constellation of signs and symptoms that occur as a complication of CAR-T therapy; they also include a grade (or score) for the complication’s severity in the clinical documentation. This information is needed to effectively manage the patient and provide additional necessary therapies to address CRS and/or CRES. As an example, the FDA approved tocilizumab for use in treating CRS at the same time that it approved Kymriah®.

For these reasons, we recommend that the ICD-10-CM Coordination and Maintenance Committee develop and release codes. We also believe it is necessary for the Committee to release a new code to identify a patient’s status as a post CAR-T patient, similar to the status codes associated with stem cell transplant.

Our understanding is that these codes, if approved, would be effective October 1, 2020, unless they can be made effective earlier. Utilization of CAR-T complication codes will enable CMS to have clear insight into the frequency and severity of CAR-T complications and track hospitalization resources differences, re-admissions, and other services required to treat complications after CAR-T is administered in the inpatient or outpatient setting.

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<sup>7</sup> Sattva S. Neelapu et al., "Chimeric antigen receptor T-cell therapy — assessment and management of toxicities," *Nature Reviews Clinical Oncology* 15, no. 1 (2017)